REFINITIV

DELTA REPORT

10-Q

ALLO - ALLOGENE THERAPEUTICS, IN

10-Q - SEPTEMBER 30, 2023 COMPARED TO 10-Q - JUNE 30, 2023

The following comparison report has been automatically generated

TOTAL DELTAS	4761
CHANGES	263
DELETIONS	225
ADDITIONS	4273

REFINITIV

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

☐ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2023 September 30, 2023

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number: 001-38693

Allogene Therapeutics, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**82-3562771**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

210 East Grand Avenue, South San Francisco, California 94080
(Address of principal executive offices including zip code)
Registrant's telephone number, including area code: (650) 457-2700

N/A

(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.001 par value per share	ALLO	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☐ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☐ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	☐	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☐

As of July 31, 2023 October 31, 2023, the registrant had 167,626,365 168,276,662 shares of common stock, $0.001 par value per share, outstanding.

Table of Contents

PART I: FINANCIAL INFORMATION

Item 1. Financial Statements

ALLOGENE THERAPEUTICS, INC.
Condensed Consolidated Balance Sheets
(Unaudited)
(In thousands, except share and per share amounts)

		June 30, 2023	December 31, 2022		September 30, 2023	December 31, 2022
Assets	**Assets**			**Assets**		
Current assets:	Current assets:			Current assets:		
Cash and cash equivalents	Cash and cash equivalents	$ 154,758	$ 61,904	Cash and cash equivalents	$ 69,246	$ 61,904
Short-term investments	Short-term investments	337,204	455,416	Short-term investments	396,259	455,416
Prepaid expenses and other current assets	Prepaid expenses and other current assets	10,139	11,504	Prepaid expenses and other current assets	7,949	11,504
Total current assets	Total current assets	502,101	528,824	Total current assets	473,454	528,824
Long-term investments	Long-term investments	52,586	59,151	Long-term investments	32,170	59,151
Operating lease right-of-use asset	Operating lease right-of-use asset	80,314	83,592	Operating lease right-of-use asset	78,643	83,592
Property and equipment, net	Property and equipment, net	106,386	112,839	Property and equipment, net	102,826	112,839

Restricted cash	Restricted cash	10,292	10,292	Restricted cash	10,292	10,292
Other long-term assets	Other long-term assets	9,382	9,564	Other long-term assets	9,576	9,564
Equity method investment	Equity method investment	9,910	12,817	Equity method investment	5,365	12,817
Total assets	Total assets	$ 770,971	$ 817,079	Total assets	$ 712,326	$ 817,079
Liabilities and stockholders' equity	**Liabilities and stockholders' equity**			**Liabilities and stockholders' equity**		
Current liabilities:	Current liabilities:			Current liabilities:		
Accounts payable	Accounts payable	$ 10,229	$ 13,890	Accounts payable	$ 6,205	$ 13,890
Accrued and other current liabilities	Accrued and other current liabilities	44,263	39,743	Accrued and other current liabilities	31,195	39,743
Deferred revenue	Deferred revenue	229	885	Deferred revenue	236	885
Total current liabilities	Total current liabilities	54,721	54,518	Total current liabilities	37,636	54,518
Lease liability, non-current	Lease liability, non-current	91,821	95,122	Lease liability, non-current	90,102	95,122
Other long-term liabilities	Other long-term liabilities	1,523	1,569	Other long-term liabilities	1,486	1,569
Total liabilities	Total liabilities	148,065	151,209	Total liabilities	129,224	151,209
Commitments and Contingencies (Notes 6 and 7)	Commitments and Contingencies (Notes 6 and 7)			Commitments and Contingencies (Notes 6 and 7)		
Stockholders' equity:	Stockholders' equity:			Stockholders' equity:		
Preferred stock, $0.001 par value: 10,000,000 shares authorized as of June 30, 2023 and December 31, 2022; no shares were issued and outstanding as of June 30, 2023 and December 31, 2022		—	—			
Common stock, $0.001 par value: 400,000,000 shares authorized as of June 30, 2023 and December 31, 2022; 167,133,664 and 144,438,304 shares issued and outstanding as of June 30, 2023 and December 31, 2022, respectively		167	144			
				Preferred stock, $0.001 par value: 10,000,000 shares authorized as of September 30, 2023 and December 31, 2022; no shares were issued and outstanding as of September 30, 2023 and December 31, 2022	—	—
				Common stock, $0.001 par value: 400,000,000 shares authorized as of September 30, 2023 and December 31, 2022; 168,175,221 and 144,438,304 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	168	144

Additional paid-in capital	Additional paid-in capital	2,039,263		1,911,632	Additional paid-in capital	2,059,333	1,911,632
Accumulated deficit	Accumulated deficit	(1,412,673)		(1,235,980)	Accumulated deficit	(1,473,988)	(1,235,980)
Accumulated other comprehensive loss	Accumulated other comprehensive loss	(3,851)		(9,926)	Accumulated other comprehensive loss	(2,411)	(9,926)
Total stockholders' equity	Total stockholders' equity	622,906		665,870	Total stockholders' equity	583,102	665,870
Total liabilities and stockholders' equity	Total liabilities and stockholders' equity	$ 770,971		$ 817,079	Total liabilities and stockholders' equity	$ 712,326	$ 817,079

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ALLOGENE THERAPEUTICS, INC.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(Unaudited)
(In thousands, except share and per share amounts)

		Three Months Ended June 30,		Six Months Ended June 30,			Three Months Ended September 30,		Nine Months Ended September 30,	
		2023	2022	2023	2022		2023	2022	2023	2022
Collaboration revenue - related party	Collaboration revenue - related party	$ 44	$ 86	$ 96	$ 147	Collaboration revenue - related party	$ 43	$ 49	$ 139	$ 196
Operating expenses:	Operating expenses:					Operating expenses:				
Research and development	Research and development	62,038	57,171	142,276	117,327	Research and development	45,977	63,641	188,253	180,968
General and administrative	General and administrative	18,524	19,509	37,408	39,406	General and administrative	17,041	18,897	54,449	58,303
Total operating expenses	Total operating expenses	80,562	76,680	179,684	156,733	Total operating expenses	63,018	82,538	242,702	239,271
Loss from operations	Loss from operations	(80,518)	(76,594)	(179,588)	(156,586)	Loss from operations	(62,975)	(82,489)	(242,563)	(239,075)
Other income (expense), net:	Other income (expense), net:					Other income (expense), net:				
Interest and other income, net	Interest and other income, net	3,778	315	5,837	807	Interest and other income, net	6,205	1,002	12,042	1,809
Other (expenses) income		(1,249)	1,492	(2,942)	1,142					
Total other income, net		2,529	1,807	2,895	1,949					
Other expenses						Other expenses	(4,545)	(1,661)	(7,487)	(519)
Total other income (expense), net						Total other income (expense), net	1,660	(659)	4,555	1,290
Net loss	Net loss	(77,989)	(74,787)	(176,693)	(154,637)	Net loss	(61,315)	(83,148)	(238,008)	(237,785)
Other comprehensive loss:	Other comprehensive loss:					Other comprehensive loss:				
Net unrealized gain (loss) on available-for-sale investments	Net unrealized gain (loss) on available-for-sale investments	2,083	(2,223)	6,075	(8,905)	Net unrealized gain (loss) on available-for-sale investments	1,440	(1,486)	7,515	(10,391)
Net comprehensive loss	Net comprehensive loss	$ (75,906)	$ (77,010)	$ (170,618)	$ (163,542)	Net comprehensive loss	$ (59,875)	$ (84,634)	$ (230,493)	$ (248,176)
Net loss per share, basic and diluted	Net loss per share, basic and diluted	$ (0.53)	$ (0.52)	$ (1.21)	$ (1.09)	Net loss per share, basic and diluted	$ (0.37)	$ (0.58)	$ (1.55)	$ (1.67)

Weighted-average number of shares used in computing net loss per share, basic and diluted	Weighted-average number of shares used in computing net loss per share, basic and diluted	146,795,826	143,385,045	145,685,993	142,376,280	Weighted-average number of shares used in computing net loss per share, basic and diluted	167,649,010	143,661,721	153,087,449	142,809,469

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ALLOGENE THERAPEUTICS, INC.
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited)
(In thousands, except share amounts)

		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity		Common Stock		Additional Paid-in	Accumulate
		Shares	Amount						Shares	Amount	Capital	Deficit
Balance - December 31, 2022	**Balance - December 31, 2022**	144,438,304	$ 144	$1,911,632	$ (1,235,980)	$ (9,926)	$ 665,870	**Balance - December 31, 2022**	144,438,304	$ 144	$1,911,632	$ (1,235,98
Issuance of common stock upon exercise of stock options and vesting of RSUs	Issuance of common stock upon exercise of stock options and vesting of RSUs	942,276	1	(1)	—	—	—	Issuance of common stock upon exercise of stock options and vesting of RSUs	942,276	1	(1)	-
Vesting of early exercised common stock	Vesting of early exercised common stock	—	—	603	—	—	603	Vesting of early exercised common stock	—	—	603	-
Stock-based compensation	Stock-based compensation	—	—	18,770	—	—	18,770	Stock-based compensation	—	—	18,770	-
Employee stock purchase plan	Employee stock purchase plan	359,753	1	1,730	—	—	1,731	Employee stock purchase plan	359,753	1	1,730	-
Net loss	Net loss	—	—	—	(98,704)	—	(98,704)	Net loss	—	—	—	(98,70
Net unrealized gain on available-for-sale investments	Net unrealized gain on available-for-sale investments	—	—	—	—	3,992	3,992	Net unrealized gain on available-for-sale investments	—	—	—	-
Balance - March 31, 2023	**Balance - March 31, 2023**	145,740,333	146	1,932,734	(1,334,684)	(5,934)	592,262	**Balance - March 31, 2023**	145,740,333	146	1,932,734	(1,334,68
Issuance of common stock from ATM offering, net of commissions and offering costs of $1.6 million	Issuance of common stock from ATM offering, net of commissions and offering costs of $1.6 million	20,288,330	20	87,898	—	—	87,918	Issuance of common stock from ATM offering, net of commissions and offering costs of $1.6 million	20,288,330	20	87,898	-

Issuance of common stock upon exercise of stock options and vesting of RSUs	Issuance of common stock upon exercise of stock options and vesting of RSUs	1,105,001	1	1,605	—	—	1,606	Issuance of common stock upon exercise of stock options and vesting of RSUs	1,105,001	1	1,605	-
Vesting of early exercised common stock	Vesting of early exercised common stock	—	—	432	—	—	432	Vesting of early exercised common stock	—	—	432	-
Stock-based compensation	Stock-based compensation	—	—	16,594	—	—	16,594	Stock-based compensation	—	—	16,594	-
Net loss	Net loss	—	—	—	(77,989)	—	(77,989)	Net loss	—	—	—	(77,98
Net unrealized gain on available-for-sale investments	Net unrealized gain on available-for-sale investments	—	—	—	—	2,083	2,083	Net unrealized gain on available-for-sale investments	—	—	—	-
Balance - June 30, 2023	**Balance - June 30, 2023**	167,133,664	$ 167	$2,039,263	$ (1,412,673)	$ (3,851)	$ 622,906	**Balance - June 30, 2023**	167,133,664	167	2,039,263	(1,412,67
Issuance of common stock from ATM offering, net of offering costs of $50.0 thousand								Issuance of common stock from ATM offering, net of offering costs of $50.0 thousand	606,235	1	3,193	-
Issuance of common stock upon exercise of stock options and vesting of RSUs								Issuance of common stock upon exercise of stock options and vesting of RSUs	204,116	—	326	-
Vesting of early exercised common stock								Vesting of early exercised common stock	—	—	432	-
Stock-based compensation								Stock-based compensation	—	—	15,354	-
Employee stock purchase plan								Employee stock purchase plan	231,206	—	765	-
Net loss								Net loss	—	—	—	(61,31
Net unrealized gain on available-for-sale investments								Net unrealized gain on available-for-sale investments	—	—	—	-
Balance - September 30, 2023								**Balance - September 30, 2023**	168,175,221	$ 168	$2,059,333	$ (1,473,98

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ALLOGENE THERAPEUTICS, INC.
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited)
(In thousands, except share amounts)

		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity		Common Stock		Additional Paid-in Capital	Accumu Defi
		Shares	Amount						Shares	Amount		
Balance - December 31, 2021	**Balance - December 31, 2021**	142,623,065	$ 142	$1,822,179	$ (903,348)	$ (2,567)	$ 916,406	**Balance - December 31, 2021**	142,623,065	$ 142	$1,822,179	$ (90
Issuance of common stock upon exercise of stock options and vesting of RSUs	Issuance of common stock upon exercise of stock options and vesting of RSUs	715,961	1	282	—	—	283	Issuance of common stock upon exercise of stock options and vesting of RSUs	715,961	1	282	
Vesting of early exercised common stock	Vesting of early exercised common stock	—	—	1,228	—	—	1,228	Vesting of early exercised common stock	—	—	1,228	
Stock-based compensation	Stock-based compensation	—	—	22,315	—	—	22,315	Stock-based compensation	—	—	22,315	
Employee stock purchase plan	Employee stock purchase plan	230,876	—	1,530	—	—	1,530	Employee stock purchase plan	230,876	—	1,530	
Net loss	Net loss	—	—	—	(79,850)	—	(79,850)	Net loss	—	—	—	(7
Net unrealized loss on available-for-sale investments	Net unrealized loss on available-for-sale investments	—	—	—	—	(6,682)	(6,682)	Net unrealized loss on available-for-sale investments	—	—	—	
Balance - March 31, 2022	**Balance - March 31, 2022**	143,569,902	143	1,847,534	(983,198)	(9,249)	855,230	**Balance - March 31, 2022**	143,569,902	143	1,847,534	(98
Issuance of common stock upon exercise of stock options and vesting of RSUs	Issuance of common stock upon exercise of stock options and vesting of RSUs	153,269	1	24	—	—	25	Issuance of common stock upon exercise of stock options and vesting of RSUs	153,269	1	24	
Vesting of early exercised common stock	Vesting of early exercised common stock	—	—	813	—	—	813	Vesting of early exercised common stock	—	—	813	
Stock-based compensation	Stock-based compensation	—	—	22,891	—	—	22,891	Stock-based compensation	—	—	22,891	
Net loss	Net loss	—	—	—	(74,787)	—	(74,787)	Net loss	—	—	—	(7
Net unrealized loss on available-for-sale investments	Net unrealized loss on available-for-sale investments	—	—	—	—	(2,223)	(2,223)	Net unrealized loss on available-for-sale investments	—	—	—	
Balance - June 30, 2022	**Balance - June 30, 2022**	143,723,171	$ 144	$1,871,262	$ (1,057,985)	$ (11,472)	$ 801,949	**Balance - June 30, 2022**	143,723,171	144	1,871,262	(1,05

Issuance of common stock upon exercise of stock options and vesting of RSUs	Issuance of common stock upon exercise of stock options and vesting of RSUs	177,678	—	135	
Vesting of early exercised common stock	Vesting of early exercised common stock	—	—	432	
Stock-based compensation	Stock-based compensation	—	—	21,148	
Employee stock purchase plan	Employee stock purchase plan	130,739	—	931	
Net loss	Net loss	—	—	—	(8
Net unrealized gain on available-for-sale investments	Net unrealized gain on available-for-sale investments	—	—	—	
Balance - September 30, 2022	**Balance - September 30, 2022**	144,031,588	$ 144	$ 1,893,908	$ (1,14

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ALLOGENE THERAPEUTICS, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(In thousands)

		Six Months Ended June 30,			Nine Months Ended September 30,	
		2023	2022		2023	2022
Cash flows from operating activities:	**Cash flows from operating activities:**			**Cash flows from operating activities:**		
Net loss	Net loss	$ (176,693)	$ (154,637)	Net loss	$ (238,008)	$ (237,785)
Adjustments to reconcile net loss to net cash used in operating activities:	Adjustments to reconcile net loss to net cash used in operating activities:			Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	Stock-based compensation	35,364	45,206	Stock-based compensation	50,718	66,354
Depreciation and amortization	Depreciation and amortization	7,150	7,367	Depreciation and amortization	10,722	11,227
Net amortization/accretion on investment securities	Net amortization/accretion on investment securities	(566)	2,240	Net amortization/accretion on investment securities	(3,510)	2,735
Non-cash rent expense	Non-cash rent expense	357	1,640	Non-cash rent expense	504	2,193
Share of loss from equity method investment		2,907	2,309			
Share of loss from, and impairment of, equity method investment				Share of loss from, and impairment of, equity method investment	7,452	3,959
Changes in operating assets and liabilities:	Changes in operating assets and liabilities:			Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	Prepaid expenses and other current assets	1,365	(8,515)	Prepaid expenses and other current assets	3,555	(2,811)
Other long-term assets	Other long-term assets	(55)	(2,803)	Other long-term assets	(421)	(3,211)

Accounts payable	Accounts payable	(3,233)	917	Accounts payable	(7,200)	1,930
Accrued and other current liabilities	Accrued and other current liabilities	5,610	(3,334)	Accrued and other current liabilities	(7,106)	(1,388)
Deferred revenue	Deferred revenue	(656)	413	Deferred revenue	(649)	466
Other long-term liabilities	Other long-term liabilities	(46)	(1,571)	Other long-term liabilities	(83)	(2,092)
Net cash used in operating activities	Net cash used in operating activities	(128,496)	(110,768)	Net cash used in operating activities	(184,026)	(158,423)
Cash flows from investing activities:	**Cash flows from investing activities:**			**Cash flows from investing activities:**		
Purchases of property and equipment	Purchases of property and equipment	(1,323)	(3,276)	Purchases of property and equipment	(1,335)	(3,499)
Proceeds from sales of investments	Proceeds from sales of investments	5,623	—	Proceeds from sales of investments	5,623	—
Proceeds from maturities of investments	Proceeds from maturities of investments	296,309	185,797	Proceeds from maturities of investments	461,467	260,379
Purchase of investments	Purchase of investments	(170,514)	(150,864)	Purchase of investments	(369,927)	(200,318)
Net cash provided by investing activities	Net cash provided by investing activities	130,095	31,657	Net cash provided by investing activities	95,828	56,562
Cash flows from financing activities:	**Cash flows from financing activities:**			**Cash flows from financing activities:**		
Proceeds from issuance of common stock from ATM offering, net of commissions and issuance costs	Proceeds from issuance of common stock from ATM offering, net of commissions and issuance costs	87,918	—	Proceeds from issuance of common stock from ATM offering, net of commissions and issuance costs	91,112	—
Proceeds from issuance of common stock upon exercise of stock options	Proceeds from issuance of common stock upon exercise of stock options	1,606	308	Proceeds from issuance of common stock upon exercise of stock options	1,932	443
Proceeds from issuance of common stock under the employee stock purchase plan	Proceeds from issuance of common stock under the employee stock purchase plan	1,731	1,530	Proceeds from issuance of common stock under the employee stock purchase plan	2,496	2,461
Net cash provided by financing activities	Net cash provided by financing activities	91,255	1,838	Net cash provided by financing activities	95,540	2,904
Net change in cash and cash equivalents and restricted cash	Net change in cash and cash equivalents and restricted cash	92,854	(77,273)	Net change in cash and cash equivalents and restricted cash	7,342	(98,957)
Cash and cash equivalents and restricted cash — beginning of period	Cash and cash equivalents and restricted cash — beginning of period	72,196	183,606	Cash and cash equivalents and restricted cash — beginning of period	72,196	183,606
Cash and cash equivalents and restricted cash — end of period	Cash and cash equivalents and restricted cash — end of period	$ 165,050	$ 106,333	Cash and cash equivalents and restricted cash — end of period	$ 79,538	$ 84,649
Non-cash investing activities:	**Non-cash investing activities:**			**Non-cash investing activities:**		
Right-of-use asset obtained in exchange for lease liability	Right-of-use asset obtained in exchange for lease liability	$ —	$ 31,361	Right-of-use asset obtained in exchange for lease liability	$ —	$ 31,361
Supplemental disclosure:	**Supplemental disclosure:**			**Supplemental disclosure:**		
Cash paid for amounts included in the measurement of lease liabilities	Cash paid for amounts included in the measurement of lease liabilities	$ (5,989)	$ (3,983)	Cash paid for amounts included in the measurement of lease liabilities	$ (9,013)	$ (6,605)

Cash received for amounts related to tenant improvement allowances	Cash received for amounts related to tenant improvement allowances	$	—	$	325	Cash received for amounts related to tenant improvement allowances	$	—	$	325

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

ALLOGENE THERAPEUTICS, INC.
Notes to Condensed Consolidated Financial Statements

1. Description of Business

Allogene Therapeutics, Inc. (the Company or Allogene) was incorporated on November 30, 2017 in the State of Delaware and is headquartered in South San Francisco, California. Allogene is a clinical-stage immuno-oncology company pioneering the development of genetically engineered allogeneic T cell product candidates for the treatment of cancer. The Company is developing a pipeline of off-the-shelf T cell product candidates that are designed to target and kill cancer cells.

Public Offerings

In November 2019, the Company entered into a sales agreement with Cowen and Company, LLC (Cowen), as amended on November 2, 2022 and November 2, 2023, under which the Company may from time-to-time issue and sell shares of its common stock through Cowen in at-the-market (ATM) offerings for an aggregate offering price of up to $250.0 million. offerings. The aggregate compensation payable to Cowen as the Company's sales agent equals up to 3.0% of the gross sales price of the shares sold through Cowen pursuant to the sales agreement. During the three nine months ended June 2023, September 30, 2023, the Company sold an aggregate of 20,288,330 20,894,565 shares of common stock in ATM offerings resulting in net proceeds of $87.9 million $91.1 million. As of June 30, 2023, $77.9 million remains available for sale under the sales agreement with Cowen.

Need for Additional Capital

The Company has sustained operating losses and expects to continue to generate operating losses for the foreseeable future. The Company's ultimate success depends on the outcome of its research and development activities as well as the ability to commercialize the Company's product candidates.

The Company had cash and cash equivalents and investments of $544.5 million $497.7 million as of June 30, 2023 September 30, 2023. Since inception through June 30, 2023 September 30, 2023, the Company has incurred cumulative net losses of $1.4 billion $1.5 billion. Management expects to incur additional losses in the future to fund its operations and conduct product research and development and recognizes the need to raise additional capital to fully implement its business plan.

The Company intends to raise additional capital through the issuance of equity securities, debt financings or other sources in order to further implement its business plan. However, if such financing is not available at adequate levels, the Company will need to reevaluate its operating plan and may be required to delay the development of its product candidates. The Company expects that its cash and cash equivalents and investments will be sufficient to fund its operations for at least the next 12 months from the date the accompanying unaudited condensed consolidated financial statements are filed with the Securities and Exchange Commission (SEC).

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) for interim financial information and pursuant to Form 10-Q and Article 10 of Regulation S-X of the SEC. Accordingly, they do not include all of the information and footnotes required by GAAP for complete consolidated financial statements. In the Company's opinion, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair presentation of the results of operations and cash flows for the periods presented have been included. The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary. All material intercompany balances and transactions have been eliminated during consolidation.

The condensed consolidated balance sheet as of June 30, 2023 September 30, 2023, the condensed consolidated statements of operations and comprehensive loss for the three and six nine months ended June 30, 2023 September 30, 2023 and 2022, the condensed consolidated statements of stockholders' equity as of June 30, 2023 September 30, 2023 and 2022, the condensed consolidated statements of cash flows for the six nine months ended June 30, 2023 September 30, 2023 and 2022, and the financial data and other financial information disclosed in the notes to the condensed consolidated financial statements are unaudited. The results of operations for the three and six nine months ended June 30, 2023 September 30, 2023 are not necessarily indicative of the results to be expected for the year ending December 31, 2023, or for any other future annual or interim period. These condensed consolidated financial statements should be read in conjunction with the Company's audited financial statements and related notes for the year ended December 31, 2022, included in the Company's Annual Report on Form 10-K filed with the SEC on February 28, 2023.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the condensed consolidated financial statements and the reported amounts of expenses during the reporting period. Significant estimates and assumptions made in the accompanying condensed consolidated financial statements include but are not limited to the fair value of common stock, the fair value of stock options, the fair value of investments, income tax uncertainties, and certain accruals. The Company evaluates its estimates

and assumptions on an ongoing basis using historical experience and other factors and adjusts those estimates and assumptions when facts and circumstances change. Actual results could differ from those estimates.

Significant Accounting Policies

There have been no significant changes to the accounting policies during the three and six nine months ended June 30, 2023 September 30, 2023, as compared to the significant accounting policies described in Note 1 of the "Notes to Financial Statements" in the Company's audited financial statements included in its Annual Report.

Recently Adopted Accounting Pronouncements

There have been no new accounting pronouncements issued or effective that are expected to have a material impact on the Company's condensed financial statements.

Recent Accounting Pronouncements Not Yet Adopted

The Company continues to monitor new accounting pronouncements issued by the FASB and does not believe any accounting pronouncements issued through the date of this report will have a material impact on the Company's condensed consolidated financial statements.

3. Fair Value Measurements

The Company measures and reports its cash equivalents, restricted cash, and investments at fair value.

Money market funds are measured at fair value on a recurring basis using quoted prices and are classified as Level 1. Investments are measured at fair value based on inputs other than quoted prices that are derived from observable market data and are classified as Level 2 inputs, except for investments in U.S. treasury securities which are classified as Level 1.

There were no Level 3 assets or liabilities as of June 30, 2023 September 30, 2023 and as of December 31, 2022.

Financial assets subject to fair value measurements on a recurring basis and the level of inputs used in such measurements by major security type as of June 30, 2023 September 30, 2023 and as of December 31, 2022 are presented in the following tables:

	June 30, 2023					September 30, 2023			
	Level 1	Level 2	Level 3	Fair Value		Level 1	Level 2	Level 3	Fair Value
	(In thousands)					(In thousands)			
Financial Assets:					**Financial Assets:**				
Money market funds (1)	$ 148,396	$ —	$ —	$ 148,396	Money market funds (1)	$ 50,937	$ —	$ —	$ 50,937
Commercial paper	—	13,990	—	13,990					
Corporate bonds	—	98,594	—	98,594	Corporate bonds	—	86,179	—	86,179
U.S. treasury securities	250,221	—	—	250,221	U.S. treasury securities	310,957	—	—	310,957
U.S. agency securities	—	26,985	—	26,985	U.S. agency securities	—	41,266	—	41,266
Total financial assets	$ 398,617	$ 139,569	$ —	$ 538,186	Total financial assets	$ 361,894	$ 127,445	$ —	$ 489,339

	December 31, 2022			
	Level 1	Level 2	Level 3	Fair Value
	(In thousands)			
Financial Assets:				
Money market funds (1)	$ 10,679	$ —	$ —	$ 10,679
Commercial paper	—	4,954	—	4,954
Corporate bonds	—	153,256	—	153,256
U.S. treasury securities	318,022	—	—	318,022
U.S. agency securities	—	39,416	—	39,416

Total financial assets	$ 328,701	$ 197,626	$ —	$ 526,327

(1) Included within cash and cash equivalents on the Company's condensed consolidated balance sheets

4. Financial Instruments

The fair value and amortized cost of cash equivalents and available-for-sale securities by major security type as of June 30, 2023 September 30, 2023 and as of December 31, 2022 are presented in the following tables:

	September 30, 2023			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(In thousands)			
Money market funds	$ 50,937	$ —	$ —	$ 50,937
Corporate bonds	86,734	3	(558)	86,179
U.S. treasury securities	311,637	—	(680)	310,957
U.S. agency securities	41,998	—	(732)	41,266
Total cash equivalents and investments	$ 491,306	$ 3	$ (1,970)	$ 489,339
Classified as:				
Cash equivalents				$ 60,910
Short-term investments				396,259
Long-term investments				32,170
Total cash equivalents and investments				$ 489,339

	June 30, 2023			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(In thousands)			
Money market funds	$ 148,396	$ —	$ —	$ 148,396
Commercial paper	13,992	—	(2)	13,990
Corporate bonds	99,518	—	(924)	98,594
U.S. treasury securities	251,687	14	(1,480)	250,221
U.S. agency securities	28,000	—	(1,015)	26,985
Total cash equivalents and investments	$ 541,593	$ 14	$ (3,421)	$ 538,186
Classified as:				
Cash equivalents				$ 148,396
Short-term investments				337,204
Long-term investments				52,586
Total cash equivalents and investments				$ 538,186

	December 31, 2022			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(In thousands)			
Money market funds	$ 10,679	$ —	$ —	$ 10,679
Commercial paper	4,956	—	(2)	4,954
Corporate bonds	156,019	25	(2,788)	153,256
U.S. treasury securities	323,077	5	(5,060)	318,022
U.S. agency securities	41,078	—	(1,662)	39,416
Total cash equivalents and investments	$ 535,809	$ 30	$ (9,512)	$ 526,327

Classified as:	
Cash equivalents	$ 11,760
Short-term investments	455,416
Long-term investments	59,151
Total cash equivalents and investments	$ 526,327

As of June 30, 2023 September 30, 2023, the remaining contractual maturities of available-for-sale securities were less than 2 years. Realized losses on available-for-sale securities for the three and six nine months ended June 30, 2023 September 30, 2023 were zero and $1.0 million, respectively. There were no significant realized losses on available-for-sale securities for the three and six nine months ended June 30, 2022 September 30, 2022. As of June 30, 2023 September 30, 2023, unrealized losses on available-for-sale securities are not attributed to credit risk. The Company believes that it is more likely than not that investments in an unrealized loss position will be held until maturity and all interest and principal will be received. The Company believes that an allowance for credit losses is unnecessary because the unrealized losses on certain of the Company's available-for-sale securities are due to market factors. As of June 30, 2023 September 30, 2023 and December 31, 2022, securities with a fair value of $191.8 million $81.0 million and $329.4 million, respectively, were in a continuous net unrealized loss position for more than 12 months. To date, the Company has not recorded any impairment charges on available-for-sale securities.

As of June 30, 2023 September 30, 2023 and December 31, 2022, the Company recognized $1.1 million $1.6 million and $1.8 million, respectively, of accrued interest receivable from available-for-sale securities within prepaid expenses and other current assets on the condensed consolidated balance sheets.

5. Balance Sheet Components

Property and Equipment, Net

Property and Equipment consist of the following:

		June 30, 2023	December 31, 2022		September 30, 2023	December 31, 2022
		(In thousands)			(In thousands)	
Leasehold improvements	Leasehold improvements	$ 108,593	$ 108,550	Leasehold improvements	$ 108,593	$ 108,550
Laboratory equipment	Laboratory equipment	32,926	32,601	Laboratory equipment	32,940	32,601
Computer equipment and purchased software	Computer equipment and purchased software	4,663	4,533	Computer equipment and purchased software	4,664	4,533
Furniture and fixtures	Furniture and fixtures	4,208	4,012	Furniture and fixtures	4,208	4,012
Construction in progress	Construction in progress	31	28	Construction in progress	28	28
Total	Total	150,421	149,724	Total	150,433	149,724
Less: accumulated depreciation	Less: accumulated depreciation	(44,035)	(36,885)	Less: accumulated depreciation	(47,607)	(36,885)
Total property and equipment, net	Total property and equipment, net	$ 106,386	$ 112,839	Total property and equipment, net	$ 102,826	$ 112,839

6. License and Collaboration Agreements

Asset Contribution Agreement with Pfizer

In April 2018, the Company entered into an Asset Contribution Agreement (the Pfizer Agreement) with Pfizer pursuant to which the Company acquired certain assets, including certain contracts and intellectual property for the development and administration of chimeric antigen receptor (CAR) T cells for the treatment of cancer. The Company is required to make milestone payments upon successful completion of regulatory and sales milestones on a target-by-target basis for the targets, including CD19 and B-cell maturation antigen (BCMA), covered by the Pfizer Agreement. The aggregate potential milestone payments upon successful completion of various regulatory milestones in the United States

and the European Union are $30.0 million or $60.0 million, depending on the target, with aggregate potential regulatory and development milestones of up to $840.0 million, provided that the Company is not obligated to pay a milestone for regulatory approval in the European Union for an anti-CD19 allogeneic CAR T cell product, because the Company does not presently hold commercial rights in such territory. The aggregate potential milestone payments upon reaching certain annual net sales thresholds in North America, Europe, Asia, Australia and Oceania (the Territory) for a certain number of targets covered by the Pfizer Agreement are $325.0 million per target. The sales milestones in the foregoing sentence are payable on a country-by-country basis until the last to expire of any Pfizer Royalty Term, as described below, for any product in such country in the Territory. In October 2019, the Territory was expanded to all countries in the world. No milestone or royalty payments were made in the three and six nine months ended June 30, 2023 September 30, 2023 or 2022.

Pfizer is also eligible to receive, on a product-by-product and country-by-country basis, royalties in single-digit percentages on annual net sales for products covered by the Pfizer Agreement. The Company's royalty obligation with respect to a given product in a given country begins upon the first sale of such product in such country and ends on the later of (i) expiration of the last claim of any applicable patent or (ii) 12 years from the first sale of such product in such country.

Research Collaboration and License Agreement with Cellectis

As part of the Pfizer Agreement, Pfizer assigned to the Company a Research Collaboration and License Agreement (the Original Cellectis Agreement) with Cellectis S.A. (Cellectis). On March 8, 2019, the Company entered into a License Agreement (the Cellectis Agreement) with Cellectis. In connection with the execution of the Cellectis Agreement, on March 8, 2019, the Company and Cellectis also entered into a letter agreement (the Letter Agreement), pursuant to which the Company and Cellectis agreed to terminate the Original Cellectis Agreement. The Original Cellectis Agreement included a research collaboration to conduct discovery and pre-clinical development activities to generate CAR T cells directed at targets selected by each party, which was completed in June 2018.

Pursuant to the Cellectis Agreement, Cellectis granted to the Company an exclusive, worldwide, royalty-bearing license, on a target-by-target basis, with sublicensing rights under certain conditions, under certain of Cellectis's intellectual property, including its TALEN and electroporation technology, to make, use, sell, import, and otherwise exploit and commercialize CAR T products directed at certain targets, including BCMA, CD70, Claudin 18.2, DLL3 and FLT3 (the Allogene Targets), for human oncologic therapeutic, diagnostic, prophylactic and prognostic purposes. In addition, certain Cellectis intellectual property rights granted by Cellectis to the Company and to Servier pursuant to the Exclusive License and Collaboration

Agreement by and between Servier and Pfizer, dated October 30, 2016, which Pfizer assigned to the Company in April 2018, will survive the termination of the Original Cellectis Agreement.

Pursuant to the Cellectis Agreement, the Company granted Cellectis a non-exclusive, worldwide, royalty-free, perpetual and irrevocable license, with sublicensing rights under certain conditions, under certain of the Company's intellectual property, to make, use, sell, import and otherwise commercialize CAR T products directed at certain targets (the Cellectis Targets).

The Cellectis Agreement provides for development and sales milestone payments by the Company of up to $185.0 million per product that is directed against an Allogene Target, with aggregate potential development and sales milestone payments totaling up to $2.8 billion. Cellectis is also eligible to receive tiered royalties on annual worldwide net sales of any products that are commercialized by the Company that contain or incorporate, are made using or are claimed or covered by, Cellectis intellectual property licensed to the Company under the Cellectis Agreement (the Allogene Products), at rates in the high single-digit percentages. Such royalties may be reduced, on a licensed product-by-licensed product and country-by-country basis, for generic entry and for payments due under licenses of third-party patents. Pursuant to the Cellectis Agreement, and subject to certain exceptions, the Company is required to indemnify Cellectis against all third party claims related to the development, manufacturing, commercialization or use of any Allogene Product or arising out of the Company's material breach of the representations, warranties or covenants set forth in the Cellectis Agreement, and Cellectis is required, subject to certain exceptions, to indemnify the Company against all third party claims related to the development, manufacturing, commercialization or use of CAR T products directed at Cellectis Targets or arising out of Cellectis's material breach of the representations, warranties or covenants set forth in the Cellectis Agreement.

The royalties are payable, on a licensed-product-by-licensed-product and country-by-country basis, until the later of (i) the expiration of the last to expire of the licensed patents covering such product; (ii) the loss of regulatory exclusivity afforded such product in such country, and (iii) the tenth anniversary of the date of the first commercial sale of such product in such country; however, in no event shall such royalties be payable, with respect to a particular licensed product, past the twentieth anniversary of the first commercial sale for such product.

Depending on the Cellectis Target, the Company has a right of first refusal or right of first negotiation to purchase or license from Cellectis rights to develop and commercialize products against such Cellectis Targets.

Under the Cellectis Agreement, the Company has certain diligence obligations to progress the development of CAR T product candidates and to commercialize one CAR T product per Allogene Target in one major market country where the Company has received regulatory approval. If the Company materially breaches any of its diligence obligations and fails to cure within 90 days, then with respect to certain targets, such target will cease to be an Allogene Target and instead will become a Cellectis Target.

Unless earlier terminated in accordance with its terms, the Cellectis Agreement will expire on a product-by-product and country-by-country basis, upon expiration of all royalty payment obligations with respect to such licensed product in such country. The Company has the right to terminate the Cellectis Agreement at will upon 60 days' prior written notice, either in its entirety or on a target-by-target basis. Either party may terminate the Cellectis Agreement, in its entirety or on a target-by-target basis, upon 90 days' prior written notice in the event of the other party's uncured material breach. The Cellectis Agreement may also be terminated by the Company upon written notice at any time in the event that Cellectis becomes bankrupt or insolvent or upon written notice within 60 days of a consummation of a change of control of Cellectis.

All costs the Company incurred in connection with this agreement were recognized as research and development expenses in the condensed consolidated statements of operations. For the three and six nine months ended June 30, 2023 September 30, 2023 and 2022, zero costs were incurred related to the achievement of a clinical development milestone under this agreement.

License and Collaboration Agreement with Servier

As part of the Pfizer Agreement, Pfizer assigned to the Company an Exclusive License and Collaboration Agreement (the Servier Agreement), with Les Laboratoires Servier SAS and Institut de Recherches Internationales Servier SAS (collectively, Servier) to develop, manufacture and commercialize certain allogeneic anti-CD19 CAR T cell product candidates, including UCART19, in the United States with the option to obtain the rights over additional anti-CD19 product candidates and for allogeneic CAR T cell product candidates directed against one additional target. In October 2019, the Company agreed to waive its rights to the one additional target.

Under the Servier Agreement, the Company has an exclusive license to develop, manufacture and commercialize UCART19, ALLO-501 and ALLO-501A in the field of anti-tumor adoptive immunotherapy in the United States, with an exclusive option to obtain the same rights for additional product candidates in the United States and, if Servier does not elect to pursue development or commercialization of those product candidates in certain markets outside of the United States pursuant to its license, outside of the United States as well. The Company is not required to make any additional payments to Servier to exercise an option. If the Company opts-in to another product candidate, Servier has the right to obtain rights to such product candidate outside the United States and to share development costs for such product candidate.

Under the Servier Agreement, the Company is required to use commercially reasonable efforts to develop and obtain marketing approval in the United States in the field of anti-tumor adoptive immunotherapy for at least one product directed against CD19, and Servier is required to use commercially reasonable efforts to develop and obtain marketing approval in the European Union, and one other country in a group of specified countries outside of the European Union and the United States, in the field of anti-tumor adoptive immunotherapy for at least one allogeneic adaptive T cell product directed against a certain Company-selected target.

For product candidates that the Company is co-developing with Servier, including UCART19, ALLO-501 and ALLO-501A, the Company is responsible for 60% of the specified development costs and Servier is responsible for the remaining 40% of the specified development costs under the applicable global research and development plan. Subject to certain restrictions, each party has the right to conduct activities that are specific to its territory outside the global research and development plan at such party's sole expense. In addition, each party is solely responsible for commercialization activities in its territory at such party's sole expense.

The Company is required to make milestone payments to Servier upon successful completion of regulatory and sales milestones. The Servier Agreement provides for aggregate potential payments by the Company to Servier of up to $137.5 million upon successful completion of various regulatory milestones, and aggregate potential payments by the Company to Servier of up to $78.0 million upon successful completion of various sales milestones. Similarly, Servier is required to make milestone payments upon successful completion of regulatory and sales milestones for products directed at the Allogene-target covered by the Servier Agreement that achieves such milestones. The total potential payments that Servier is obligated to make to the Company under the Servier Agreement upon successful completion of regulatory and sales milestones are $42.0 million and €70.5 million ($76.7 74.5 million), respectively. The foregoing milestones are subject to certain adjustments if the Company obtains rights for certain products outside of the United States.

Each party is also eligible to receive tiered royalties on annual net sales in countries within the paying party's respective territory of any licensed products that are commercialized by such party that are directed at the targets licensed by such party under the Servier Agreement. The royalty rates are in a range from the low tens to the high teen percentages. Such royalties may be reduced for interchangeable drug entry, expiration of patent rights and amounts paid pursuant to licenses of third-party patents. The royalty obligation for each party with respect to a given licensed product in a given country in each party's respective territory (the Servier Royalty Term) begins upon the first commercial sale of such product in such country and ends after a defined number of years.

Unless earlier terminated in accordance with the Servier Agreement, the Servier Agreement will continue, on a licensed product-by-licensed product and country-by-country basis, until the Servier Royalty Term with respect to the sale of such licensed product in such country expires.

For the three and six nine months ended June 30, 2023 September 30, 2023, the Company recorded $0.5 million $0.1 million and $0.4 million, respectively, of net cost recoveries under the cost-sharing terms of the Servier Agreement as a reduction to research and development expenses. For the three and six nine months ended June 30, 2022 September 30, 2022, the Company recorded $11.6 million $3.8 million and $16.7 million $20.4 million, respectively, of net cost recoveries. As of June 30, 2023 and September 30, 2023, no amounts due from Servier were recorded in the condensed consolidated balance sheet. As of December 31, 2022, amounts due from Servier of zero and $1.5 million, respectively, were recorded in other current assets in the accompanying condensed consolidated balance sheets. sheet.

On September 15, 2022, Servier sent a notice of discontinuation (Discontinuation) of its involvement in the development of all licensed products directed against CD19, including UCART19, ALLO-501 and ALLO-501A (collectively, CD19 Products), pursuant to the Servier Agreement. Servier's Discontinuation provides the Company with the right to elect a license to the CD19 Products outside of the United States (Ex-US Option) and does not otherwise affect the Company's current exclusive license for the development and commercialization of CD19 Products in the United States. However, Servier has disputed the implications of the Discontinuation, namely whether development cost contributions continue and the timeframe during which the Company has the right to elect a license to CD19 Products outside of the United States.

In December 2022, Servier sent the Company a notice for material breach due to the Company's purported refusal to allow an audit of certain manufacturing costs under the cost share arrangement. While the Company does not believe Servier has such an audit right, the Company submitted to a review of the Company's manufacturing costs of CD19 Products to recover outstanding manufacturing costs owed by Servier to the Company. In July 2023, Servier sent the Company a second notice for material breach alleging that the Company overcharged Servier based on Servier and its accounting firm's review of costs eligible for cost-sharing under the Servier Agreement. The Company disagrees with the material breach allegations and the Company is disputing such allegations. Absent a resolution between the parties, disputed matters may be resolved in arbitration as specified in the Servier Agreement.

Research Collaboration and License Agreement with Notch Therapeutics

On November 1, 2019, the Company entered into a Collaboration and License Agreement (the Notch Agreement) with Notch Therapeutics Inc. (Notch), pursuant to which Notch granted to Allogene an exclusive, worldwide, royalty-bearing, sublicensable license under certain of Notch's intellectual property to develop, make, use, sell, import, and otherwise commercialize therapeutic gene-edited T cell and/or natural killer (NK) cell products from induced pluripotent stem cells directed at certain CAR targets for initial application in non-Hodgkin lymphoma, acute lymphoblastic leukemia and multiple myeloma. In addition, Notch has granted Allogene an option to add certain specified targets to its exclusive license in exchange for an agreed per-target option fee.

The Notch Agreement includes a research collaboration to conduct research and pre-clinical development activities to generate engineered cells directed to Allogene's exclusive targets, which will be conducted in accordance with an agreed research plan and budget under the oversight of a joint development committee. Allogene will reimburse Notch's costs incurred in accordance with such plan and budget. The term of the research collaboration will expire upon the earlier of (i) the fifth anniversary of the date of the Notch Agreement, (ii) at Allogene's election, following the joint development committee's determination that for each exclusive target, Notch has met certain success criteria, or (iii) the joint development committee's determination that the research collaboration cannot be reasonably pursued against any exclusive target due to technical infeasibility or safety issues.

In connection with the execution of the Notch Agreement, Allogene made an upfront payment to Notch of $10.0 million in return for a license to access Notch's technology in order to conduct research pursuant to the Notch Agreement. In addition, Allogene made a $5.0 million investment in Notch's series seed convertible preferred stock, resulting in Allogene having a 25% ownership interest in Notch's outstanding capital stock on a fully diluted basis immediately following the investment. In connection with this investment, an Allogene representative serves on the Notch Board of Directors. In February 2021, the Company made an additional $15.9 million investment in Notch's Series A preferred stock. In October 2021, the Company made an additional $1.8 million investment in Notch's common stock. Immediately following this transaction, the Company's share in Notch was 23.0% on a voting interest basis. The Company did not have a controlling interest in Notch as of June 30, 2023 September 30, 2023, and continued to account for its investment in Notch as an equity method investment.

Under the Notch Agreement, Notch will be eligible to receive up to $7.25 million upon achieving certain agreed research milestones, up to $4.0 million per exclusive target upon achieving certain pre-clinical development milestones, and up to $283.0 million per exclusive target and cell type (i.e., T cell or NK cell) upon achieving certain clinical, regulatory and commercial milestones. Notch is also entitled to receive tiered royalties in the mid to high single digit range on Allogene's sales of licensed products, subject to certain reductions, for a term, on a country-by-country and product-by-product basis, commencing on first commercial sale of such product in such country and continuing until the latest of (i) the date upon which there is no valid claim of the licensed patents in such country of sale that covers such product, (ii) the expiration of applicable data or other regulatory exclusivity in such country of sale or (iii) a defined period from the first commercial sale of such product in such country.

The terms of the Notch Agreement will continue on a product-by-product and country-by-country basis until Allogene's payment obligations with respect to such product in such country have expired. Following such expiration, Allogene's license with respect to such product and country shall be perpetual, irrevocable, fully paid up and royalty-free. Allogene may terminate the Collaboration Agreement in whole or on a product-by-product basis upon ninety days' prior written notice to Notch. Either party may also terminate the Collaboration Agreement with written notice upon material breach by the other party, if such breach has not been cured within a defined period of receiving such notice, or in the event of the other party's insolvency.

For the three and six months ended June 30, 2023 September 30, 2023, no collaboration costs were recorded by the Company. For the nine months ended September 30, 2023, the Company recorded $0.8 million $1.8 million in collaboration costs as research and $1.8 million development expenses. For the three and nine months ended September 30, 2022, the Company recorded $1.0 million and $2.8 million, respectively, in collaboration costs as research and development expenses. For the three and six nine months ended June 30, 2022 September 30, 2023, the Company recorded $0.9 million and $1.7 million, respectively, $3.0 million in collaboration costs other expenses as research and development expenses.

impairment loss on its equity method investment in Notch. No impairment loss was recorded in 2022.

Strategic Alliance with The University of Texas MD Anderson Cancer Center

On October 6, 2020, the Company entered into a strategic five-year collaboration agreement with The University of Texas MD Anderson Cancer Center (MD Anderson) for the preclinical and clinical investigation of allogeneic CAR T cell product candidates. The Company and MD Anderson are collaborating on the design and conduct of preclinical and clinical studies with oversight from a joint steering committee.

Under the terms of the agreement, the Company has committed up to $15.0 million of funding for the duration of the agreement. Payment of this funding is contingent on mutual agreement to study orders in order for any study to be included under the alliance. The Company made an upfront payment of $3.0 million to MD Anderson in the year ended December 31, 2020. and made an additional upfront payment of $3.0 million to MD Anderson in October 2023. The Company is obligated to make further payments to MD Anderson each year upon the anniversary of the agreement effective date through the duration of the agreement term. These costs are expensed to research and development as MD Anderson renders the services under the strategic alliance.

The agreement may be terminated by either party for material breach by the other party. Individual studies may be terminated for, among other things, material breach, health and safety concerns or where the institutional review board, the review board at the clinical site with oversight of the clinical study, requests termination of any study. Where any legal or regulatory authorization is finally withdrawn or terminated, the relevant study will also terminate automatically.

For the three and six nine months ended June 30, 2023 September 30, 2023, the Company recorded $0.6 million $0.2 million and $1.0 million $1.2 million, respectively, in collaboration costs as research and development expenses. For the three and six nine months ended June 30, 2022 September 30, 2022, the Company recorded $0.6 million $0.2 million and $0.9 million $1.1 million, respectively, in collaboration costs as research and development expenses.

Joint Venture and License Agreement with Allogene Overland Biopharm (CY) Limited

On December 14, 2020, the Company entered into a License Agreement with Allogene Overland Biopharm (CY) Limited (Allogene Overland), a joint venture established by the Company and Overland Pharmaceuticals (CY) Inc. (Overland), pursuant to a Share Purchase Agreement, dated December 14, 2020, for the purpose of developing, manufacturing and commercializing certain allogeneic CAR T cell therapies for patients in greater China, Taiwan, South Korea and Singapore (the JV Territory).

Pursuant to the Share Purchase Agreement, the Company acquired Seed Preferred Shares in Allogene Overland representing 49% of Allogene Overland's outstanding stock as partial consideration for the License Agreement, and Overland acquired Seed Preferred Shares representing 51% of Allogene Overland's outstanding stock for $117.0 million in upfront and certain quarterly cash payments, to support operations of Allogene Overland. As of June 30, 2023, the Company and Overland are the sole equity holders in Allogene Overland. The Company received $40 million from Allogene Overland as partial consideration for the License Agreement.

Pursuant to the License Agreement, the Company granted Allogene Overland an exclusive license to develop, manufacture and commercialize certain allogeneic CAR T cell candidates directed at four targets, BCMA, CD70, FLT3, and DLL3, in the JV Territory. As consideration, the Company would also be entitled to additional regulatory milestone payments of up to $40.0 million and, subject to certain conditions, tiered low-to-mid single-digit sales royalties. Subsequent to entering into the License Agreement, Allogene Overland assigned the License Agreement to a wholly-owned subsidiary, Allogene Overland BioPharm (HK) Limited. On April 1, 2022, Allogene Overland HK assigned the License Agreement to Allogene Overland Biopharm (PRC) Co., Limited.

Promises that the Company concluded were distinct performance obligations in the License Agreement included: (1) the license of intellectual property and delivery of know-how, (2) the manufacturing license, related know-how and support, (3) if and when available know-how developed in future periods, and (4) participation in the joint steering committee.

In order to determine the transaction price, the Company evaluated all the payments to be received during the duration of the contract. Fixed consideration exists in the form of the upfront payment. Regulatory milestones and royalties were considered variable consideration. The Company constrains the estimated variable consideration when it assesses it is probable that a significant reversal in the amount of cumulative revenue recognized may occur in future periods. Milestone fees were constrained and not included in the transaction price due to the uncertainties of research and development. The Company re-evaluates the transaction price, including the estimated variable consideration included in the transaction price and all constrained amounts, in each reporting period and as uncertain events are resolved or other changes in circumstances occur. The shares of Series Seed Preferred Stock were accounted for as part of the Company's joint venture and equity method accounting upon formation of the joint venture, and as such, were excluded from the transaction price. The Company determined that the initial transaction price consists of the upfront payment of $40.0 million. The allocation of the transaction price is performed

based on standalone selling prices, which are based on estimated amounts that the Company would charge for a performance obligation if it were sold separately. The transaction price allocated to the license of intellectual property and delivery of know-how will be recognized upon grant of license and delivery of know-how. The transaction price allocated to (i) the manufacturing license, related know-how and support services, (ii) if and when available know-how developed in future periods, and (iii) participation in the joint steering committee, will be recognized over time as the services are delivered. Funds received in advance are recorded as deferred revenue and will be recognized as the performance obligations are satisfied.

The Company has determined that Allogene Overland is a variable interest entity as of June 30, 2023 September 30, 2023 and December 31, 2022, respectively. The Company does not have the power to independently direct the activities which most significantly affect Allogene Overland's economic performance. Accordingly, the Company did not consolidate Allogene Overland because the Company determined that it was not the primary beneficiary.

For the three and six nine months ended June 30, 2023 and 2022, September 30, 2023, the Company recognized less than $0.1 million and $0.1 million, respectively, of collaboration revenue. For the three and nine months ended September 30, 2022, the Company recognized less than $0.1 million and $0.2 million, respectively, of collaboration revenue. Revenue recognized was due to delivery of the know-how performance obligations. For the three and six months ended June 30, 2023 September 30, 2023, no net cost recoveries were recorded by the Company. For the nine months ended September 30, 2023, the Company recorded less than $0.1 million of net cost recoveries under the terms of the license agreement as a reduction to research and development expenses. For the three and six nine months ended June 30, 2022 September 30, 2022, the Company recorded zero $0.3 million and $0.3 million $0.6 million, respectively, of net cost recoveries under the terms of the license agreement as a reduction to research and development expenses.

Collaboration and License Agreement with Antion

On January 5, 2022, the Company entered into an exclusive collaboration and global license agreement (Antion Collaboration and License Agreement) with Antion Biosciences SA (Antion) for Antion's miRNA technology (miCAR), to advance multiplex gene silencing as an additional tool to develop next generation allogeneic CAR T products. Pursuant to the agreement, Antion will exclusively collaborate with the Company on oncology products for a defined period. The Company will also have exclusive worldwide rights to commercialize products incorporating Antion technology developed during the collaboration.

The Antion Collaboration and License Agreement includes an exclusive research collaboration to conduct research and development of the use of Antion's proprietary technologies to produce certain products for a defined period, which will be conducted in accordance with an agreed research plan and budget under the oversight of a joint steering committee. The Company will reimburse Antion's costs incurred in accordance with such plan and budget.

In connection with the execution of the Antion Collaboration and License Agreement, the Company made an upfront payment to Antion of $3.5 million in return for a license to access Antion's technology in order to conduct research pursuant to the agreement. The upfront payment was fully recognized as research and development expense as the license had no foreseeable alternative future use. In January 2022, the Company made a $3.0 million investment in Antion's preferred stock. The Company accounts for its investment in Antion's preferred stock as an equity investment measured at cost less any impairment. In connection with this investment, a Company representative was appointed to Antion's Board of Directors.

In July 2023, the Company and Antion entered into an amendment to the Antion Collaboration and License Agreement. Under the terms of this amendment, Antion's exclusivity obligation relating to the collaboration was terminated; however, Antion agreed to certain restrictions on its ability to pursue products directed against specific targets. Also, in lieu of the Company's prior obligation to make a $3.0 million investment in Antion following the completion of certain milestones, the Company agreed to make a $2.0 million investment in Antion's preferred stock and acquired warrants to purchase an additional $3.0 million of Antion's preferred stock. The Company accounts for the fair value of the new investment of $1.0 million as an equity investment and the remaining $1.0 million was recorded as research and development expense.

Under the Antion Collaboration and License Agreement, Antion will be eligible to receive up to $35.3 million for four products upon achievement of certain development and regulatory milestones. For each additional product, Antion will be eligible to receive $2.0 million upon achievement of a regulatory milestone. Antion is also entitled to receive a low single-digit royalty on the Company's sales of licensed products, subject to certain reductions.

For the three and six months ended June 30, 2023 September 30, 2023, no collaboration costs were recorded by the Company. For the nine months ended September 30, 2023, the Company recorded $1.3 million and $1.8 million, respectively, in research and development expenses related to collaboration costs. For the three and six nine months ended June 30, 2022 September 30, 2022, the Company recorded $0.4 million $0.6 million and $3.9 million $4.5 million, respectively, in research and development expenses related to the upfront payment and collaboration costs. For the three and six nine months ended June 30, 2023 September 30, 2023, $0.1 million $0.4 million in costs were incurred related to the achievement of a milestone under the Antion Collaboration and License Agreement. For the three and six nine months ended June 30, 2022 September 30, 2022, zero no costs were incurred related to the achievement of milestone under the Antion Collaboration and License Agreement.

As of June 30, 2023 September 30, 2023 and December 31, 2022, research and development expenses recorded in accrued and other liabilities were $1.4 million $0.4 million and $0.5 million, respectively. As of June 30, 2023 September 30, 2023 and December 31, 2022, the Company's total equity investment in Antion was $4.0 million and $3.0 million, respectively, and is recognized in other long-term assets in the condensed consolidated balance sheets.

On July 11, 2023, the Company and Antion entered into an amendment to the Antion Collaboration and License Agreement. Under the terms of this amendment, Antion's exclusivity obligation relating to the collaboration was terminated; however, Antion agreed to certain restrictions on its ability to pursue products directed against specific targets. Also, in lieu of the

Company's prior obligation to make a $3 million investment in Antion following the completion of certain milestones, the Company agreed to make a $2 million investment in Antion's preferred shares and acquired warrants to purchase an additional $3 million of Antion's preferred shares.

7. Commitments and Contingencies

Leases

In August 2018, the Company entered into an operating lease agreement (HQ Lease) for office and laboratory space which consists of approximately 68,000 square feet located in South San Francisco, California. The lease term was 127 months beginning August 2018 through February 2029 with an option to extend the term for seven years which was not reasonably assured of exercise. The Company has made certain tenant improvements, including the addition of laboratory space, and has received $5.0 million of tenant improvement allowances through December 31, 2020. The rent payments began on March 1, 2019 after an abatement period. In December 2021, the Company amended its lease agreement to lease an additional 47,566

square feet of office and laboratory space in South San Francisco, California, as part of the same building as the Company's current headquarters. The lease term commenced in April 2022 and is for a period of 120 months. The rent payments for the expansion premises began in August 2022 after an abatement period. The lease term for the existing premises was also extended and the lease for both the existing and expansion premises will expire on March 31, 2032 with an option to extend the term for eight years which is not reasonably assured of exercise.

In October 2018, the Company entered into an operating lease agreement for office and laboratory space which consists of 14,943 square feet located in South San Francisco, California. The lease term was 124 months beginning November 2018 through February 2029, with an option to extend the term for another seven years which was not reasonably assured of exercise. The Company has made certain tenant improvements, including the upgrading of current office and laboratory space with a lease incentive allowance of $0.8 million. Rent payments began in November 2018. In December 2021, the Company amended its lease agreement to extend the term of the lease to be co-terminus with the HQ Lease. The lease term will expire March 31, 2032 with an option to extend the term for eight years which is not reasonably assured of exercise.

In February 2019, the Company entered into a lease agreement for approximately 118,000 square feet of space to develop a cell therapy manufacturing facility in Newark, California. The lease term is 188 months and began in November 2020. Upon certain conditions, the Company has two ten-year options to extend the lease, both of which are not reasonably assured of exercise. The Company has received $3.0 million of tenant improvement allowances for costs related to the design and construction of certain Company improvements.

The Company maintains letters of credit for the benefit of landlords which is disclosed as restricted cash in the condensed consolidated balance sheets. Restricted cash related to letters of credit due to landlords was $6.0 million as of June 30, 2023 September 30, 2023 and December 31, 2022.

The balance sheet classification of our lease liabilities were as follows (in thousands):

		June 30, 2023	December 31, 2022		September 30, 2023	December 31, 2022
Operating lease liabilities	Operating lease liabilities			Operating lease liabilities		
Current portion included in accrued and other current liabilities	Current portion included in accrued and other current liabilities	$ 6,381	$ 6,002	Current portion included in accrued and other current liabilities	$ 6,578	$ 6,002
Long-term portion of lease liabilities	Long-term portion of lease liabilities	91,821	95,122	Long-term portion of lease liabilities	90,102	95,122
Total operating lease liabilities	Total operating lease liabilities	$ 98,202	$ 101,124	Total operating lease liabilities	$ 96,680	$ 101,124

The components of lease costs for operating leases, which were recognized in operating expenses, were as follows (in thousands):

		Three Months Ended June 30,		Six Months Ended June 30,			Three Months Ended September 30,		Nine Months Ended September 30,	
		2023	2022	2023	2022		2023	2022	2023	2022
Operating lease cost	Operating lease cost	$ 3,175	$ 3,177	$ 6,356	$ 5,299	Operating lease cost	$ 3,180	$ 3,177	$ 9,536	$ 8,476
Variable lease cost	Variable lease cost	672	397	1,363	852	Variable lease cost	587	616	1,950	1,468
Total lease costs	Total lease costs	$ 3,847	$ 3,574	$ 7,719	$ 6,151	Total lease costs	$ 3,767	$ 3,793	$ 11,486	$ 9,944

Cash paid for amounts included in the measurement of lease liabilities for the six nine months ended June 30, 2023 September 30, 2023 was $6.0 million $9.0 million and was included in net cash used in operating activities in the Company's condensed consolidated statements of cash flows.

The undiscounted future non-cancellable lease payments under the Company's operating leases as of June 30, 2023 September 30, 2023 were as follows:

Year ending December 31:	Year ending December 31:	(In thousands)	Year ending December 31:	(In thousands)
2023 (remaining 6 months)		$ 6,060		
2023 (remaining 3 months)			2023 (remaining 3 months)	$ 3,036
2024	2024	12,447	2024	12,447
2025	2025	12,627	2025	12,627
2026	2026	12,819	2026	12,819
2027	2027	13,257	2027	13,257
2028 and thereafter	2028 and thereafter	77,235	2028 and thereafter	77,235
Total undiscounted lease payments	Total undiscounted lease payments	134,445	Total undiscounted lease payments	131,421
Less: Present value adjustment	Less: Present value adjustment	(36,243)	Less: Present value adjustment	(34,741)
Total	Total	$ 98,202	Total	$ 96,680

Operating lease liabilities are based on the net present value of the remaining lease payments over the remaining lease term. In determining the present value of lease payments, the Company uses its estimated incremental borrowing rate. The weighted average discount rate used to determine the operating lease liability was 6.88% 6.89%. As of June 30, 2023 September 30, 2023, the weighted average remaining lease term for our operating leases is 9.50 9.27 years.

Other Commitments

In July 2020, the Company entered into a Solar Power Purchase and Energy Services Agreement for the installation and operation of a solar photovoltaic generating system and battery energy storage system at the Company's cell therapy manufacturing facility in Newark, California. The agreement has a term of 20 years and commenced in September

2022. The Company is obligated to pay for electricity generated from the system at an agreed rate for the duration of the agreement term. Termination of the agreement by the Company will result in a termination payment due of approximately $4.3 million. In connection with the agreement, the Company maintains a letter of credit for the benefit of the service provider in the amount of $4.3 million which is recorded as restricted cash in the condensed consolidated balance sheets as of June 30, 2023 September 30, 2023 and December 31, 2022.

The Company has entered into certain license agreements for intellectual property which is used as part of its development and manufacturing processes. Each of these respective agreements are generally cancellable by the Company. These agreements require payment of annual license fees and may include conditional milestone payments for achievement of specific research, clinical and commercial events, and royalty payments. The timing and likelihood of any significant conditional milestone payments or royalty payments becoming due was not probable as of June 30, 2023 September 30, 2023.

The Company enters into contracts in the normal course of business that includes arrangements with clinical research organizations, vendors for preclinical research and vendors for manufacturing. These agreements generally allow for cancellation with notice. As of June 30, 2023 September 30, 2023, the Company had non-cancellable purchase commitments of $0.4 million $4.0 million.

8. Equity Method Investments

Notch Therapeutics

In conjunction with the execution of the Notch Agreement (see Note 6), the Company also entered into a Share Purchase Agreement with the Company acquiring shares of Notch's Series Seed convertible preferred stock for a total investment cost of $5.1 million which includes transaction costs of $0.1 million, resulting in a 25% ownership interest in Notch. In February 2021, the Company made a $15.9 million investment in Notch's Series A preferred stock. Immediately following this transaction, the Company's share in Notch was 20.7% on a voting interest basis. In October 2021, the Company made an additional $1.8 million investment in Notch's common stock. Immediately following this transaction, the Company's share in Notch was 23.0% on a voting interest basis.

The Company's total equity investment in Notch as of June 30, 2023 September 30, 2023 and December 31, 2022 was $9.9 million $5.4 million and $12.8 million, respectively, and the Company accounted for the investment using the equity method of accounting. During the three and six nine months ended June 30, 2023 September 30, 2023 and 2022, the Company recognized its share of Notch's net loss under the other expenses caption within the condensed consolidated statements of operations.

During the three and nine months ended September 30, 2023, the Company recognized $3.0 million of impairment loss under the other expenses caption within the condensed consolidated statements of operations. No impairment loss was recorded in 2022.

Allogene Overland Biopharm (CY) Limited

In conjunction with the execution of the License Agreement with Allogene Overland (see Note 6), the Company also entered into a Share Purchase Agreement and Shareholders' Agreement with the joint venture company acquiring shares of Allogene Overland's Seed Preferred Shares representing a 49% ownership interest in exchange for entering into a License Agreement which had a carrying value of zero. The Company accounts for its investment in Allogene Overland as an equity method investment at carrying value. The Company's total equity investment in Allogene Overland was zero as of June 30, 2023 September 30, 2023 and December 31, 2022.

The Company's equity investment in Allogene Overland as of June 30, 2023 September 30, 2023 and December 31, 2022 had a zero carryover basis. Therefore, the Company did not account for its share of losses incurred by Allogene Overland. See Note 6 for further details.

9. Stock-Based Compensation

In June 2018, the Company adopted its 2018 Equity Incentive Plan (Prior 2018 Plan). The Prior 2018 Plan provided for the Company to sell or issue common stock or restricted common stock, or to grant incentive stock options or nonqualified stock options for the purchase of common stock, to employees, members of the Company's Board of Directors and consultants of the Company under terms and provisions established by the Company's Board of Directors. In September 2018, the Board of Directors adopted a new amended and restated 2018 Equity Incentive Plan as a successor to and continuation of the Prior 2018 Plan, which became effective in October 2018 (the 2018 Plan), which authorized additional shares for issuance and provided for an automatic annual increase to the number of shares issuable under the 2018 Plan by an amount equal to 5% of the total number of shares of common stock outstanding on December 31st of the preceding calendar year. The term of any stock option granted under the 2018 Plan cannot exceed 10 years. The Company generally grants stock-based awards with service conditions only. Options granted typically vest over a four-year period but may be granted with different vesting terms. Restricted Stock Units granted typically vest annually over a four-year period but may be granted with different vesting terms. Options shall not have an exercise price less than 100% of the fair market value of the Company's common stock on the grant date. If the individual possesses more than 10% of the combined voting power of all classes of stock of the Company, the exercise price shall not be less than 110% of the fair market value of a common share of stock on the date of grant. This requirement is applicable to incentive stock options only.

As of June 30, 2023 September 30, 2023, there were 6,377,914 6,730,462 shares reserved by the Company under the 2018 Plan for the future issuance of equity awards.

Stock Option Exchange Program

On June 21, 2022, the Company commenced an offer to exchange certain eligible options held by eligible employees of the Company for new options (the Exchange Offer). The Exchange Offer expired on July 19, 2022. Pursuant to the Exchange Offer, 199 eligible holders elected to exchange, and the Company accepted for cancellation, eligible options to purchase an aggregate of 3,666,600 shares of the Company's common stock, representing approximately 93.5% of the total shares of common stock underlying the eligible options. On July 19, 2022, immediately following the expiration of the Exchange Offer, the Company granted new options to purchase 3,666,600 shares of common stock, pursuant to the terms of the Exchange Offer and the 2018 Plan. The exercise price of the new options granted pursuant to the Exchange Offer was $13.31 per share, which was the closing price of

the common stock on the Nasdaq Global Select Market on the grant date of the new options. The new options are subject to a new three-year vesting schedule, vesting in equal annual installments over the vesting term. Each new option has a maximum term of seven years.

The exchange of stock options was treated as a modification for accounting purposes. The incremental expense of $5.2 million for the modified options was calculated using a lattice option pricing model. The incremental expense and the unamortized expense remaining on the exchanged options as of the modification date are being recognized over the new three-year service period.

Stock Option Activity

The following summarizes option activity under the 2018 Plan:

	Outstanding Options			
	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contract Term (in years)	Aggregate Intrinsic Value (in thousands)
Balance, December 31, 2022	17,569,575	$ 12.90	7.73	$ 6,658
Granted	8,103,938	5.28		
Exercised	(712,931)	2.27		2,226
Forfeited	(3,016,808)	11.55		
Balance, June 30, 2023	21,943,774	$ 10.62	7.86	$ 2,142
Exercisable, June 30, 2023	13,354,883	$ 12.35	7.14	$ 2,135
Vested and expected to vest, June 30, 2023	21,943,774	$ 10.62	7.86	$ 2,142

	Outstanding Options			
	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contract Term (in years)	Aggregate Intrinsic Value (in thousands)
Balance, December 31, 2022	17,569,575	$ 12.90	7.73	$ 6,658
Granted	9,300,276	5.13		
Exercised	(782,538)	2.47		2,283
Forfeited	(4,097,851)	10.85		
Balance, September 30, 2023	21,989,462	$ 10.37	7.61	$ 673
Exercisable, September 30, 2023	13,651,398	$ 12.33	6.95	$ 673
Vested and expected to vest, September 30, 2023	21,989,462	$ 10.37	7.61	$ —

The aggregate intrinsic values of options outstanding, exercisable, vested and expected to vest were calculated as the difference between the exercise price of the options and the closing price of the Company's common stock on the Nasdaq Global Select Market on June 30, 2023 September 30, 2023. For the six nine months ended June 30, 2023 September 30, 2023, the estimated weighted-average grant-date fair value of employee options granted was $3.55 $3.45 per share. As of June 30, 2023 September 30, 2023, there was $77.2 $67.0 million of unrecognized stock-based compensation related to unvested stock options, which is expected to be recognized over a weighted-average period of 2 years, 248 198 days.

The fair value of employee, consultant and director stock option awards was estimated at the date of grant using a Black-Scholes option-pricing model with the following assumptions:

	Six Months Ended June 30,	
	2023	2022
Expected term in years	5.27 - 6.08	5.27 - 6.08
Expected volatility	73.37% - 73.85%	70.82% - 72.57%

	Nine Months Ended September 30,	
	2023	2022
Expected term in years	5.27 - 6.08	5.25 - 6.08
Expected volatility	73.18% - 73.85%	70.82% - 73.39%

Expected risk-free interest rate	Expected risk-free interest rate	3.45% - 4.10%	1.61% - 3.49%	Expected risk-free interest rate	3.45% - 4.30%	1.61% - 3.49%
Expected dividend	Expected dividend	0%	0%	Expected dividend	0%	0%

The fair value of the options granted under the Option Exchange program was estimated at the date of grant using a lattice option pricing model with the following assumptions: expected volatility of 73.74%, expected risk-free rate of 3.06%, expected dividends of 0% and expected exercise barrier of 2.57.

Expected term— The expected term represents the period that stock-based awards are expected to be outstanding. The expected term for option grants is determined using the simplified method. The simplified method deems the term to be the average of the time-to-vesting and the contractual life of the stock-based awards.

Expected volatility— The Company uses an average historical stock price volatility of comparable public companies within the biotechnology and pharmaceutical industry that were deemed to be representative of future stock price trends as the Company does not have sufficient trading history for its common stock. The Company will continue to apply this process until a sufficient amount of historical information regarding the volatility of its own stock price becomes available.

Risk-free interest rate—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of option.

Expected dividend—The Company has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

Expected exercise barrier - — The modified options are assumed to be exercised upon vesting and when the ratio of stock market price to exercise price reaches 2.57, or expiration, whichever is earlier.

Restricted Stock Unit Activity

The following summarizes restricted stock unit activity under the 2018 Plan:

		Outstanding Restricted Stock Units						Outstanding Restricted Stock Units					
		Restricted Stock Units	Weighted-Average Grant Date Fair Value per Share	Weighted Average Remaining Vesting Life (in years)	Aggregate Intrinsic Value (in thousands)			Restricted Stock Units	Weighted-Average Grant Date Fair Value per Share	Weighted Average Remaining Vesting Life (in years)	Aggregate Intrinsic Value (in thousands)
Unvested December 31, 2022	Unvested December 31, 2022	5,493,406	$ 16.86	1.54	$ 34,554	Unvested December 31, 2022	5,493,406	$ 16.86	1.54	$ 34,554
Granted	Granted	10,591,009	4.73	2.55		Granted	11,215,162	4.70	2.0	
Vested	Vested	(1,349,143)	17.70			Vested	(1,545,458)	18.49		
Forfeited	Forfeited	(1,901,277)	10.30			Forfeited	(2,993,273)	9.35		
Unvested June 30, 2023		12,833,995	$ 7.74	2.34	$ 63,785					
Vested and expected to vest, June 30, 2023		12,833,995	$ 7.74	2.34	$ 63,785					
						Unvested September 30, 2023	12,169,837	$ 7.29	2.14	$ 38,578
						Vested and expected to vest, September 30, 2023	12,169,837	$ 7.29	2.14	$ 38,578

As of June 30, 2023 September 30, 2023, there was $71.9 $60.1 million of unrecognized stock-based compensation related to unvested restricted stock units, which is expected to be recognized over a weighted-average period of 2 years, 223 176 days.

For the six nine months ended June 2023, September 30, 2023, the Company granted 3,015,272 3,069,751 performance-based restricted stock units and 1,939,646 1,994,125 restricted stock units with a market condition to certain executive officers and other employees pursuant to the 2018 Plan. These awards are subject to the holders' continuous service to the Company through each applicable vesting event. Through June 30, 2023 September 30, 2023, the Company believes that the achievement of the requisite performance conditions for these awards are not probable. As a result, no compensation expense has been recognized related to the performance-based restricted stock units in the quarter ended June

30, 2023 September 30, 2023. The Company recognized $0.9 $1.5 million in stock-based compensation expense related to the restricted units with a market condition for the six nine months ended June 30, 2023 September 30, 2023.

Total stock-based compensation expense related to stock options, restricted stock units, employee stock purchase plan and vesting of the founders' common stock was as follows (in thousands):

		Three Months Ended June 30,		Six Months Ended June 30,			Three Months Ended September 30,		Nine Months Ended September 30,	
		2023	2022	2023	2022		2023	2022	2023	2022
Research and development	Research and development	$ 6,919	$ 12,972	$ 16,116	$ 24,052	Research and development	$ 6,733	$ 11,016	$ 22,849	$ 35,068
General and administrative	General and administrative	9,675	9,919	19,248	21,154	General and administrative	8,621	10,132	27,869	31,286
Total stock-based compensation	Total stock-based compensation	$ 16,594	$ 22,891	$ 35,364	$ 45,206	Total stock-based compensation	$ 15,354	$ 21,148	$ 50,718	$ 66,354

Early Exercised Options

The Company allows certain of its employees and its directors to exercise options granted under the Prior 2018 Plan and the 2018 Plan prior to vesting. The shares related to early exercised stock options are subject to the Company's lapsing repurchase right upon termination of employment or service on the Company's Board of Directors at the lesser of the original purchase price or fair market value at the time of repurchase. In order to vest, the holders are required to provide continued service to the Company. The proceeds are initially recorded in accrued and other liabilities for the current portion, and other long-term liabilities for the non-current portion. The proceeds are reclassified to paid-in capital as the repurchase right lapses. In May 2021, 293,594 options were early exercised, resulting in proceeds of $5.3 million. As of June 30, 2023 September 30, 2023 and December 31, 2022, there was $1.5 million $1.1 million and $1.9 million, respectively, recorded in accrued and other liabilities and zero and $0.6 million, respectively, recorded in other long-term liabilities related to shares held by employees and directors that were subject to repurchase. The underlying shares are shown as outstanding in the condensed consolidated financial statements but the shares which are subject to future vesting conditions are not included in the calculation of earnings per share.

10. Related Party Transactions

Collaboration Revenue

In December 2020, the Company entered into a license agreement with Allogene Overland, a corporate joint venture entity and related party (see Note 6). The license agreement was subsequently assigned to a wholly-owned subsidiary of Allogene Overland, Allogene Overland BioPharm (HK) Limited. On April 1, 2022, Allogene Overland HK assigned the license agreement to Allogene Overland Biopharm (PRC) Co., Limited. For the three and six nine months ended June 30, 2023 and 2022, September 30, 2023, the Company recognized less than $0.1 million and $0.1 million, respectively, of collaboration revenue under this agreement. For the three and nine months ended September 30, 2022, the Company recognized less than $0.1 million and $0.2 million, respectively, of collaboration revenue.

For the three and six months ended June 30, 2023 September 30, 2023, no net cost recoveries were recorded by the Company. For the nine months ended September 30, 2023, the Company recorded less than $0.1 million of net cost recoveries under the terms of the license agreement as a reduction to research and development expenses. For the three and six nine months ended June 30, 2022 September 30, 2022, the Company recorded zero $0.3 million and $0.3 million $0.6 million, respectively, of net cost recoveries under the terms of the license agreement as a reduction to research and development expenses.

Sublease Agreement

In December 2018, the Company entered into a sublease with Bellco Capital LLC (Bellco) for 1,293 square feet of office space in Los Angeles, California for a three year term. On April 1, 2020, Bellco Capital Advisors Inc. assumed all rights, title, interests and obligations under the sublease from Bellco Capital LLC. In November 2021, the sublease was extended to June 30, 2025. The sublease was amended, effective in July 2022, to move to a nearby location, with office space of 737 square feet. The Company's executive chairman, Arie Belldegrun, M.D., FACS, is a trustee of the Belldegrun Family Trust, which controls Bellco Capital Advisors Inc. The total right of use asset and associated liability recorded related to this related party lease was $0.1 million and $0.2 million at June 30, 2023 September 30, 2023 and December 31, 2022, respectively.

In February 2023, the Company subleased an additional 2,030 square feet of office space in Los Angeles, California, from Bellco. The sublease term is 115 months, subject to certain early termination rights. The sublease is expected to commence January 1, 2024. The Company paid approximately $0.2 million towards the monthly base rent due for the first month of the sublease term and its share of the security deposit. The total estimated amount of base rent is $2.9 million, subject to rent abatement. The Company also expects to contribute to certain tenant improvements to the space totaling to its share of the total tenant contribution.

Consulting Agreements

In June 2018, the Company entered into a services agreement with Two River Consulting, LLC (Two River), a firm affiliated with the Company's President and Chief Executive Officer, the Company's Executive Chair of the board of directors, and a director of the Company to provide various managerial, clinical development, administrative, accounting and

financial services to the Company. The costs incurred for services provided under this agreement were $0.1 million and $0.2 million $0.3 million for the three and six nine months ended June 30, 2023 September 30, 2023, respectively. The costs incurred for services provided under this agreement were $0.3 million $0.1 million and $0.5 million $0.6 million for the three and six nine months ended June 30, 2022 September 30, 2022, respectively.

In August 2018, the Company entered into a consulting agreement with Bellco. Pursuant to the consulting agreement, Bellco provides certain services for the Company, which are performed by Dr. Belldegrun, the Company's executive chair, and include without limitation, providing advice and analysis with respect to the Company's business, business strategy and potential opportunities in the field of allogeneic CAR T cell therapy and any other aspect of the CAR T cell therapy business as the Company may agree. In consideration for these services, the Company paid Bellco $40,217 per month in arrears commencing January 2022. The Company may also, at its discretion, pay Bellco an annual performance award in an amount up to 60% of the aggregate compensation payable to Bellco in a calendar year. The Company also reimburses Bellco for out-of-pocket expenses incurred in performing the services. The costs incurred for services provided, bonus, and out-of-pocket expenses incurred under this consulting agreement were $0.2 million $0.3 million and $0.4 million $0.7 million for the three and six nine months ended June 30, 2023 September 30, 2023, respectively. The costs incurred for services provided and out-of-pocket expenses incurred under this consulting agreement were $0.2 million and $0.4 million $0.6 million for the three and six nine months ended June 30, 2022 September 30, 2022, respectively.

11. Income Taxes

The Company has a history of losses and expects to record a loss in 2023. The Company continues to maintain a full valuation allowance against its net deferred tax assets.

12. Net Loss Per Share

The following outstanding potentially dilutive shares have been excluded from the calculation of diluted net loss per share for the period presented due to their anti-dilutive effect:

		June 30,			September 30,	
		2023	2022		2023	2022
Stock options to purchase common stock	Stock options to purchase common stock	21,943,774	18,248,432	Stock options to purchase common stock	21,989,462	18,122,447
Restricted stock units subject to vesting	Restricted stock units subject to vesting	12,833,995	6,186,433	Restricted stock units subject to vesting	12,169,837	6,108,670
Expected shares to be purchased under Employee Stock Purchase Plan	Expected shares to be purchased under Employee Stock Purchase Plan	1,749,295	1,300,989	Expected shares to be purchased under Employee Stock Purchase Plan	1,289,434	750,317
Early exercised stock options subject to future vesting	Early exercised stock options subject to future vesting	82,051	186,224	Early exercised stock options subject to future vesting	58,360	162,532
Total	Total	36,609,115	25,922,078	Total	35,507,093	25,143,966

13. Subsequent Events

None.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion of our financial condition and results of operations in conjunction with our unaudited condensed consolidated financial statements and the related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q and the audited financial statements and notes thereto as of and for the year ended December 31, 2022 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K for the year ended December 31, 2022 (Annual Report), which was filed with the Securities and Exchange Commission (SEC) on February 28, 2023. Unless the context requires otherwise, references in this Quarterly Report on Form 10-Q to the "Company", "Allogene," "we," "us" and "our" refer to Allogene Therapeutics, Inc., and references to "Servier" collectively refer to Les Laboratoires Servier SAS and Institut de Recherches Internationales Servier SAS.

In addition to historical financial information, this discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the section titled "Risk Factors" under Part II, Item 1A below. In some cases, you can identify forward-looking statements by terminology such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potentially," "predict," "should," "will" or the negative of these terms or other similar expressions.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

Overview

We are a clinical-stage immuno-oncology company pioneering the development of genetically engineered allogeneic T cell product candidates for the treatment of cancer. We are developing a pipeline of off-the-shelf T cell product candidates that are designed to target and kill cancer cells. Our engineered T cells are allogeneic, meaning they are derived from healthy donors for intended use in any patient, rather than from an individual patient for that patient's use, as in the case of autologous T cells. We believe this key difference will enable us to deliver readily available treatments faster, more reliably, at greater scale, and to more patients.

We have a deep pipeline of allogeneic chimeric antigen receptor (CAR) T cell product candidates targeting multiple promising antigens in a host of hematological malignancies and solid tumors. Pursuant to our Exclusive Collaboration and License Agreement with Servier (Servier Agreement), we have exclusive rights to ALLO-501 and ALLO-501A, CAR T cell product candidates targeting CD19, in the United States. ALLO-501 and ALLO-501A use Cellectis S.A. (Cellectis) technologies under which Servier holds an exclusive worldwide license from Cellectis.

We are conducting long-term follow-up in our Phase 1 clinical trial (the ALPHA trial) of ALLO-501 in patients with relapsed or refractory (R/R) non-Hodgkin lymphoma (NHL). We are also progressing the development of the second-generation version of ALLO-501, known as ALLO-501A. We have removed rituximab recognition domains in ALLO-501A, which we believe will potentially facilitate treatment of more patients, as rituximab is a typical part of a treatment regimen for a patient with NHL.

In the fourth quarter of 2022, we initiated a Phase 2 clinical trial for ALLO-501A (the ALPHA2 trial) in R/R large B cell lymphoma (LBCL). The single-arm ALPHA2 trial will utilize a single dose of ALLO-501A at 120 million CAR+ cells with a lymphodepletion regimen comprised of fludarabine (30 mg/m2/day x 3 days) and cyclophosphamide (300 mg/m2/day x 3 days) plus ALLO-647 (90 mg). We plan to enroll approximately 100 patients who have received at least two prior lines of therapy and have not received any prior anti-CD19 therapy, including CAR T therapy. The primary endpoint is objective response rate (ORR) and the key secondary endpoint is duration of response (DoR).

We recently In the first quarter of 2023, we initiated the EXPAND trial, which is expected to enroll approximately 70 patients with R/R LBCL and is intended to demonstrate the overall contribution of ALLO-647 to the benefit to risk ratio of the lymphodepletion regimen for ALLO-501A. Patients will be randomized to receive the same single 120 million CAR+ cell dose of ALLO-501A as in the ALPHA2 trial and either lymphodepletion with fludarabine and cyclophosphamide (control arm) or the lymphodepletion regimen of the ALPHA2 trial (active arm). The primary endpoint of this trial is progression free survival, and the key secondary endpoints are ORR, DoR, and the safety of ALLO-647. Assuming favorable outcomes and subject to FDA discussions, we plan to seek FDA approval of ALLO-501A and ALLO-647 on the basis of the ALPHA2 trial and the EXPAND companion trial.

We are sponsoring two clinical trials in adult patients with R/R multiple myeloma, a Phase 1 clinical trial (the UNIVERSAL trial) of ALLO-715 and a Phase 1 clinical trial (the IGNITE trial) of ALLO-605, our first product candidate to incorporate our TurboCAR™ technology. TurboCAR™ technology allows cytokine signaling to be engineered selectively into CAR T cells and has shown the ability to improve the potency and persistence of the cells and to delay exhaustion of the cells in preclinical models. We are currently reviewing and optimizing the manufacturing process for our BCMA program and are not enrolling patients in the UNIVERSAL and IGNITE trials at this time.

We also continue to advance the Our Phase 1 clinical trial (the TRAVERSE trial) of ALLO-316, an allogeneic CAR T cell product candidate targeting CD70, in adult patients with advanced or metastatic clear cell renal cell carcinoma (ccRCC), is ongoing. Subject to ongoing results in the TRAVERSE trial, we intend to complete planned dose exploration and initiate expansion cohort enrollment in 2023. early 2024.

Since inception, we have had significant operating losses. Our net losses were $78.0 million $61.3 million and $176.7 million $238.0 million for the three and six nine months ended June 30, 2023 September 30, 2023, respectively. As of June 30, 2023 September 30, 2023, we had an accumulated deficit of $1.4 billion $1.5 billion. As of June 30, 2023 September 30, 2023, we had $544.5 million $497.7 million in cash and cash equivalents and investments and we expect our cash runway to fund operations into 2H 2025. We expect to continue to incur net losses for the foreseeable future, and we expect our research and development expenses and general and administrative expenses will continue to increase.

Recent Developments

On June 15, 2023, we presented updated data at the International Conference on Malignant Lymphoma (ICML) from the Phase 1 ALPHA/ALPHA2 trials of ALLO-501/501A We continue enrollment in 33 CAR T naïve patients with relapsed/refractory (r/r) large B-cell lymphoma (LBCL) treated with the Alloy manufacturing process material across different CAR T dosing and lymphodepletion regimens. Earlier in June, data from the 12 patients, a subset of these 33 CAR T naïve patients, who received regimen being utilized in ongoing Phase 2 trials was presented at American Society of Clinical Oncology (ASCO) Annual Meeting.

The updated analysis (data cutoff April 20, 2023) of ALPHA/ALPHA2 examined data from all 33 CAR T-naïve patients with r/r LBCL who were treated with a single infusion or consolidation therapy (two planned infusions) of ALLO-501/501A manufactured using the Alloy manufacturing process. Patients received lymphodepletion with fludarabine (30 mg/m2/day x 3 days) and cyclophosphamide (300 mg/m2/day x 3 days) and varying doses of ALLO-647 (from 13 mg/day to 30 mg/day x 3 days).

The median time from enrollment to the start of therapy was three days and 100% of patients received product per specifications. No patients received bridging therapy. The dosing breakdown for the 33 patients included in this data set is as follows:

- 12 patients treated with a single dose of ALLO-501/501A and FCA90 lymphodepletion (Phase 2 regimen; recap of the ASCO 2023 data presentation)
- 6 patients treated with a single dose of ALLO-501/501A and FCA<90 lymphodepletion
- 15 patients treated with consolidation dosing of ALLO-501/501A and split lymphodepletion

	CAR T- Naïve Patients with r/r LBCL Alloy Manufacturing Process			
	All (N=33)	Phase 2 Regimen (N=12)	FCA<90 (N=6)	Consolidation Dosing (N=15)
Overall Response Rate (ORR), n (%)	19 (58)	8 (67)	3 (50)	8 (53)
Complete Response Rate (CR), n (%)	14 (42)	7 (58)	1 (17)	6 (40)
6 Month Complete Response, n (%)	10 (30)	5 (42)	0	5 (33)

Seven of 12 (58%) patients receiving the Phase 2 regimen achieved a CR and five (42%) maintained a CR through Month 6. Of the five patients who were in CR at 6 months, four (80%) remained in CR. The fifth patient had disease progression at 24 months. The median duration of response was 23.1 months with three patients remaining in remission for over 24 months and the longest remaining in remission for over 31 months. Across all 33 patients the CR rate was 42% with 30% maintaining a CR at Month 6. These results indicating complete responses are more common with lymphodepletion regimens containing 90 mg of ALLO-647 (FCA90). Median duration of response for both the overall population (n=33) and the patients treated with the Phase 2 regimen (n=12) was 23.1 months.

	CAR T- Naïve Patients with r/r LBCL							
	All (N=33)		Phase 2 Regimen (N=12)		FCA<90 (N=6)		Consolidation (N=15)	
	All Gr N (%)	Gr 3+ N (%)	All Gr N (%)	Gr 3+ N (%)	All Gr N (%)	Gr 3+ N (%)	All Gr N (%)	Gr 3+ N (%)
CRS	8 (24)	0	4 (33)	0	1 (17)	0	3 (20)	0
Neurotoxicity	13 (39)	2 (6)	4 (33)	0	2 (33)	0	7 (47)	2 (13)
ICANS	0	0	0	0	0	0	0	0
GvHD	0	0	0	0	0	0	0	0
IRR	16 (49)	3 (9)	8 (67)	0	3 (50)	1 (17)	5 (33)	2 (13)
Infection	19 (58)	5 (15)	8 (67)	1 (8)	3 (50)	1 (17)	8 (53)	3 (20)
Prolonged Gr3+ Cytopenia	—	4 (12)	—	2 (17)	—	0	—	2 (13)

Across the 33 patients, treatment was generally well tolerated with no incidences of Grade 3 or greater cytokine release syndrome, and no cases of immune effector cell-associated neurotoxicity syndrome or graft versus host disease. Cytopenia and infections were manageable and comparable to the experience with autologous CAR T cell therapies in patients with r/r LBCL.

The ALPHA/ALPHA2 Phase 1 trials were designed to assess the safety, tolerability, and preliminary efficacy at increasing dose levels of ALLO-501 and ALLO-501A, allogeneic CAR T cell product candidates that target CD19. In addition to exploring multiple cell doses, these studies evaluated various doses of ALLO-647, our proprietary lymphodepleting antibody is designed to prevent premature rejection of AlloCAR T cells. We are currently enrolling the potentially pivotal Phase 2 ALPHA2 trial of ALLO-501A in LBCL relapsed/refractory (R/R) large B cell lymphoma (LBCL). In addition to previous regulatory approvals to initiate the ALPHA2 trial in the U.S. and Canada, during the third quarter of 2023, we received regulatory approvals to expand this trial to include European and Australian clinical trial sites, and we have initiated the trial at a number of sites. We expect to complete enrollment in the first half of 2024 with the first data readout planned by the end of 2024.

We are currently enrolling in Canada and expect also continue enrollment in Europe our EXPAND trial, which is expected to begin support licensure of ALLO-647, the Company's anti-CD52 monoclonal antibody used in conjunction with standard low-dose FC (fludarabine, 30 mg/m2 and cyclophosphamide 300 mg/m2, daily for 3 days) lymphodepletion regimens. In addition to previous regulatory approval to initiate the EXPAND trial in the U.S., during the third quarter of 2023, we received regulatory approval to include European clinical trial sites and in Australia by year-end.

In addition, we are conducting EXPAND, a trial in which patients with LBCL are randomized to receive a lymphodepletion regimen comprised of fludarabine and cyclophosphamide with or without ALLO-647. EXPAND is currently open to have opened enrollment in the US that region.

Effective August 2, 2023, Eric T. Schmidt, Ph.D. resigned from his position as our Chief Financial Officer and is expected to be open in additional regions in 2023. on October 16, 2023, we appointed Geoffrey Parker as our Chief Financial Officer. On August 14, 2023, we appointed Earl Douglas as our General Counsel.

Our Research and Development and License Agreements

Asset Contribution Agreement with Pfizer

In April 2018, we entered into an Asset Contribution Agreement (Pfizer Agreement) with Pfizer pursuant to which we acquired certain assets and assumed certain liabilities from Pfizer, including agreements with Cellectis and Servier as described below, and other intellectual property for the development and administration of CAR T cells for the

treatment of cancer. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the Pfizer Agreement.

Research Collaboration and License Agreement with Cellectis

In June 2014, Pfizer entered into a Research Collaboration and License Agreement with Cellectis. In April 2018, Pfizer assigned the agreement to us pursuant to the Pfizer Agreement. In March 2019, we terminated the agreement with Cellectis and entered into a new license agreement with Cellectis. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further descriptions of the prior agreement with Cellectis and the new license agreement with Cellectis.

Exclusive License and Collaboration Agreement with Servier

In October 2015, Pfizer entered into an Exclusive License and Collaboration Agreement (Servier Agreement) with Servier to develop, manufacture and commercialize certain allogeneic anti-CD19 CAR products, including UCART19, in the United States with the option to obtain the rights over certain additional allogeneic anti-CD19 CAR product candidates and for allogeneic CAR T cell product candidates directed against one additional target. In April 2018, Pfizer assigned the agreement to us pursuant to the Pfizer Agreement. In October 2019, we agreed to waive our rights to the one additional target.

On September 15, 2022, Servier sent a notice of discontinuation (Discontinuation) of its involvement in the development of all licensed products directed against CD19, including UCART19, ALLO-501 and ALLO-501A (collectively, CD19 Products), pursuant to the Servier Agreement. Servier's Discontinuation provides us with the right to elect a license to the CD19 Products outside of the United States (Ex-US Option) and does not otherwise affect our current exclusive license for the development and commercialization of CD19 Products in the United States. Upon any exercise of the Ex-US Option by us, our potential milestone payments with respect to ALLO-501A would increase for any first dosing in Phase 2, first dosing in Phase 3 and regulatory approval by €46 million in the aggregate. In addition, upon any such exercise of the Ex-US Option, Servier's obligation to reimburse us for 40% of the development costs for CD19 Products would cease. However, Servier has disputed the implications of the Discontinuation, namely whether development cost contributions continue and the timeframe during which we have the right to elect a license to CD19 Products outside of the United States. Moreover, in December 2022, Servier sent us a notice for material breach due to our purported refusal to allow an audit of certain manufacturing costs under our cost share arrangement. While we do not believe Servier has such an audit right, we submitted to a review of our manufacturing costs of CD19 Products to recover outstanding manufacturing costs owed by Servier to us. In July 2023, Servier sent us a second notice for material breach alleging that we overcharged Servier based on Servier and its accounting firm's review of costs eligible for cost-sharing under the Servier Agreement. We disagree with the material breach allegations and we are disputing such allegations. For more information, see "Risk Factors—Servier's Discontinuation of its involvement in the development of CD19 Products and our disputes with Servier may have adverse consequences."

See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the Servier Agreement.

Collaboration and License Agreement with Notch

On November 1, 2019, we entered into a Collaboration and License Agreement (the Notch Agreement) with Notch Therapeutics Inc. (Notch), pursuant to which Notch granted us an exclusive, worldwide, royalty-bearing, sublicensable license under certain of Notch's intellectual property to develop, make, use, sell, import, and otherwise commercialize therapeutic gene-edited T cell and/or natural killer cell products from induced pluripotent stem cells directed at certain CAR targets for initial application in NHL, B-cell precursor acute lymphoblastic leukemia (ALL) and multiple myeloma. In addition, Notch has granted us an option to add certain specified targets to our exclusive license in exchange for an agreed upon per-target option fee.

The Notch Agreement includes a research collaboration to conduct research and pre-clinical development activities to generate engineered cells directed to our exclusive targets, which will be conducted in accordance with an agreed research plan and budget under the oversight of a joint development committee. In connection with the execution of the Notch Agreement,

we made an upfront payment to Notch of $10.0 million. In addition, we made a $5.0 million investment in Notch's series seed convertible preferred stock, resulting in us having a 25% ownership interest in Notch's outstanding capital stock on a fully diluted basis immediately following the investment. In February 2021, we made an additional $15.9 million investment in Notch's Series A preferred stock. In October 2021, we made an additional $1.8 million investment in Notch's common stock. Immediately following this transaction, our share in Notch was 23.0% on a voting interest basis. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the Notch Agreement.

Strategic Alliance with The University of Texas MD Anderson Cancer Center

On October 6, 2020, we entered into a strategic five-year collaboration agreement with The University of Texas MD Anderson Cancer Center (MD Anderson) for the preclinical and clinical investigation of allogeneic CAR T cell product candidates. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the agreement with MD Anderson.

License Agreement with Allogene Overland Biopharm (CY) Limited

On December 14, 2020, we entered into a License Agreement with Allogene Overland Biopharm (CY) Limited (Allogene Overland), a joint venture established by us and Overland Pharmaceuticals (CY) Inc. (Overland), pursuant to a Share Purchase Agreement, dated December 14, 2020, for the purpose of developing, manufacturing and commercializing certain allogeneic CAR T cell therapies for patients in greater China, Taiwan, South Korea and Singapore (the JV Territory). Allogene Overland subsequently assigned the License Agreement to a wholly-owned subsidiary, Allogene Overland BioPharm (HK) Limited (Allogene Overland HK). On April 1, 2022, Allogene Overland HK assigned the License Agreement to Allogene Overland Biopharm (PRC) Co., Limited. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the License Agreement and Share Purchase Agreement with Allogene Overland.

Collaboration and License Agreement with Antion

On January 5, 2022, we entered into an exclusive collaboration and global license agreement (Antion Collaboration and License Agreement) with Antion Biosciences SA (Antion) for Antion's miRNA technology (miCAR), to advance multiplex gene silencing as an additional tool to develop next generation allogeneic CAR T products. On July 11, 2023, we entered into an amendment to the Antion Collaboration and License Agreement, which included a $2 million investment in Antion's preferred shares and the acquisition of warrants to purchase an additional $3 million of Antion's preferred shares. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the Antion Agreement and the July 2023 amendment.

Components of Results of Operations

Revenues

As of June 30, 2023 September 30, 2023, our revenue has been exclusively generated from our collaboration and license agreement with Allogene Overland Biopharm (PRC) Co., Limited. See Note 6 to our financial statements appearing elsewhere in this Quarterly Report for more information related to our recognition of revenue and the Allogene Overland Biopharm (PRC) Co., Limited agreement.

In the future, we may generate revenue from a combination of product sales, government or other third-party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements or a combination of these approaches. We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the timing and amount of license fees, milestones and other payments, and the amount and timing of payments that we receive upon the sale of our products, to the extent any are successfully commercialized. If we fail to complete the development of our product candidates in a timely manner or obtain regulatory approval of them, our ability to generate future revenue, and our results of operations and financial position, will be materially adversely affected.

Operating Expenses

Research and Development

To date, our research and development expenses have related primarily to discovery efforts, preclinical and clinical development, and manufacturing of our product candidates. Research and development expenses for the three and six nine months ended June 30, 2023 September 30, 2023 included costs associated with our clinical and preclinical stage pipeline candidates and research into newer technologies. The most significant research and development expenses for the year to date relate to costs incurred for the development of our most advanced product candidates and include:

- expenses incurred under agreements with our collaboration partners and third-party contract organizations, investigative clinical trial sites that conduct research and development activities on our behalf, and consultants;
- costs related to production of clinical materials, including fees paid for raw materials and to contract manufacturers;
- laboratory and vendor expenses related to the execution of preclinical and clinical trials;
- employee-related expenses, which include salaries, benefits and stock-based compensation;
- facilities and other expenses, which include expenses for rent and maintenance of facilities, depreciation and amortization expense and supplies; and
- other significant research and development costs including overhead costs.

We expense all research and development costs in the periods in which they are incurred. We accrue for costs incurred as the services are being provided by monitoring the status of the project and the invoices received from our external service providers. We adjust our accrual as actual costs become known. Where contingent milestone payments are due to third parties under research and development arrangements or license agreements, the milestone payment obligations are expensed when the milestone results are achieved.

We have reimbursed Servier for 60% of the costs associated with the prior development of UCART19, including for the long-term follow-up of patients in the CALM and PALL clinical trials of UCART19. We believe Servier is required to reimburse us for 40% of the costs associated with the development of ALLO-501 and ALLO-501A.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect our research and development expenses to increase in the future as our clinical programs progress and as we seek to initiate clinical trials of additional product candidates. The cost of advancing our manufacturing process as well as the cost of manufacturing product candidates for clinical trials are included in our research and development expense. We also expect to incur increased research and development expenses as we selectively identify and develop additional product candidates. However, it is difficult to determine with certainty the duration and completion costs of our current or future preclinical programs and clinical trials of our product candidates.

The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors that include, but are not limited to, the following:

- per patient trial costs;
- biomarker analysis costs;
- the cost and timing of manufacturing for the trials;
- the number of patients that participate in the trials;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the total number of cells that patients receive;
- the drop-out or discontinuation rates of patients;

- potential additional safety monitoring or other studies requested by regulatory agencies, including to resolve any future clinical hold;
- the duration of patient follow-up; and
- the efficacy and safety profile of the product candidates.

In addition, the probability of success for each product candidate will depend on numerous factors, including safety, efficacy, competition, manufacturing capability and commercial viability. We will determine which programs to pursue and how much to fund each program in response to the scientific and clinical success of each product candidate, as well as an assessment of each product candidate's commercial potential.

Because our product candidates are still in clinical and preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of product candidates or whether, or when, we may achieve profitability.

General and Administrative

General and administrative expenses consist primarily of salaries and other staff-related costs, including stock-based compensation for options and restricted stock units granted. Other significant costs include costs relating to facilities and overhead costs, legal fees relating to corporate and patent matters, insurance, investor relations costs, fees for accounting and consulting services, information technology, costs and support for our board of directors and board committees, and other general and administrative costs. General and administrative costs are expensed as incurred, and we accrue for services provided by third parties related to the above expenses by monitoring the status of services provided and receiving estimates from our service providers, and adjusting our accruals as actual costs become known.

We expect our general and administrative expenses to increase over the next several years to support our continued research and development activities, manufacturing activities, potential commercialization of our product candidates and operating as a public company. These increases are anticipated to include increased costs related to the hiring of additional personnel, developing commercial infrastructure, fees to outside consultants, lawyers and accountants, and costs associated with being a public company such as expenses related to services associated with maintaining compliance with Nasdaq listing rules and SEC requirements, complying with and advancing environmental, social and governance matters, and insurance and investor relations costs.

Other Income (Expense), Net:

Interest and Other Income, Net

Interest and other income, net consists of interest earned on our cash and cash equivalents and investments, as well as investment gains and losses recognized during the period.

Other Income (Expenses)

Other income (expenses) consists of non-operating income and expenses, including primarily our share of equity investments' net losses for the period. period from, and impairment of, our equity method investments.

Results of Operations

Comparison of the Three Months Ended June 30, 2023 September 30, 2023 and 2022

The following sets forth our results of operations for the three months ended June 30, 2023 September 30, 2023 and 2022 (dollars in thousands):

	Three Months Ended June 30,		Change		
	2023	2022	$	%	
Collaboration revenue - related party	$ 44	$ 86	$ (42)	(49) %	Collaboration revenue - related party $
Operating expenses:					Operating expenses:
Research and development	62,038	57,171	4,867	9 %	Research and development
General and administrative	18,524	19,509	(985)	(5) %	General and administrative
Total operating expenses	80,562	76,680	3,882	5 %	Total operating expenses
Loss from operations	(80,518)	(76,594)	(3,924)	5 %	Loss from operations
Other income (expense), net:					Other income (expense), net:

Interest and other income, net	Interest and other income, net	3,778	315	3,463	*	Interest and other income, net
Other (expenses) income		(1,249)	1,492	(2,741)	*	
Total other income, net		2,529	1,807	722	40 %	
Other expenses						Other expenses
Total other income (expense), net						Total other income (expense), net
Net Loss	Net Loss	$ (77,989)	$ (74,787)	$ (3,202)	4 %	Net Loss $

* Change in excess of 100%

Collaboration revenue - related party

Collaboration revenue was less than $0.1 million for the three months ended June 30, 2023 September 30, 2023 and 2022. Revenue recognized in the three months ended June 30, 2023 September 30, 2023 and 2022 was due to the delivery of the know-how performance obligations related to the License Agreement entered into with Allogene Overland on December 14, 2020.

Research and Development Expenses

Research and development expenses were $62.0 $46.0 million and $57.2 million $63.6 million for the three months ended June 30, 2023 September 30, 2023 and 2022, respectively. The increase decrease of $4.9 million $17.7 million was driven primarily by a decrease in Servier cost recoveries of $11.0 million, offset by a decrease in personnel related costs of $5.2 million and a decrease in external costs relating to the advancement of our product candidates due to the timing of development activities and manufacturing runs of $0.9 million. $10.3 million and a decrease in personnel related costs of $6.6 million, of which $4.3 million was stock-based compensation expense.

General and Administrative Expenses

General and administrative expenses were $18.5 $17.0 million and $19.5 million $18.9 million for the three months ended June 30, 2023 September 30, 2023 and 2022, respectively. The decrease of $1.0 million $1.9 million was primarily due to a decrease in personnel related costs of $0.6 million and a decrease in expenses related to outside services $2.1 million, of $0.3 million. which $1.5 million was stock-based compensation expense.

Interest and Other Income, Net

Interest and other income, net was $3.8 million $6.2 million and $0.3 $1.0 million for the three months ended June 30, 2023 September 30, 2023 and 2022, respectively. The increase of $3.5 million $5.2 million was due to higher yields and a corresponding increase in the interest earned on our cash, cash equivalents and investments.

Comparison of the Six Nine Months Ended June 30, 2023 September 30, 2023 and 2022

The following sets forth our results of operations for the six nine months ended June 30, 2023 September 30, 2023 and 2022 (dollars in thousands):

		Six Months Ended June 30,		Change		
		2023	2022	$	%	
Collaboration revenue - related party	Collaboration revenue - related party	$ 96	$ 147	$ (51)	(35) %	Collaboration revenue - related party
Operating expenses:	Operating expenses:					Operating expenses:
Research and development	Research and development	142,276	117,327	24,949	21 %	Research and development
General and administrative	General and administrative	37,408	39,406	(1,998)	(5) %	General and administrative
Total operating expenses	Total operating expenses	179,684	156,733	22,951	15 %	Total operating expenses
Loss from operations	Loss from operations	(179,588)	(156,586)	(23,002)	15 %	Loss from operations
Other income (expense), net:	Other income (expense), net:					Other income (expense), net:

Interest and other income, net	Interest and other income, net	5,837	807	5,030	*	Interest and other income, net
Other (expenses) income		(2,942)	1,142	(4,084)	*	
Total other income, net		2,895	1,949	946	49 %	
Other expenses						Other expenses
Total other income (expense), net						Total other income (expense), net
Net Loss	Net Loss	$ (176,693)	$ (154,637)	$ (22,056)	14 %	Net Loss

* Change in excess of 100%

Collaboration revenue - related party

Collaboration revenue was $0.1 million for the six nine months ended June 30, 2023 September 30, 2023 and 2022. Revenue recognized in the six nine months ended June 30, 2023 September 30, 2023 and 2022 was due to the delivery of the know-how performance obligations related to the License Agreement entered into with Allogene Overland on December 14, 2020.

Research and Development Expenses

Research and development expenses were $142.3 million $188.3 million and $117.3 million $181.0 million for the six nine months ended June 30, 2023 September 30, 2023 and 2022, respectively. The increase of $24.9 million $7.3 million was driven primarily by a decrease in Servier cost recoveries of $16.1 million $19.7 million and an increase in facilities costs of $1.7 million, offset by a decrease in personnel related costs of $10.9 million, of which $12.2 million was a decrease in stock-based compensation expense, and a decrease in external costs relating to the advancement of our product candidates due to the timing of development activities and manufacturing runs of $11.0 million, offset by a decrease in personnel related costs of $4.4 million $3.0 million.

General and Administrative Expenses

General and administrative expenses were $37.4 million $54.4 million and $39.4 million $58.3 million for the six nine months ended June 30, 2023 September 30, 2023 and 2022, respectively. The decrease of $2.0 million $3.9 million was primarily due to a decrease in personnel related costs of $1.3 million and a decrease in expenses related to outside services $3.5 million, of $0.7 million. which $3.4 million was stock-based compensation expense.

Interest and Other Income, Net

Interest and other income, net was $5.8 $12.0 million and $0.8 $1.8 million for the six nine months ended June 30, 2023 September 30, 2023 and 2022, respectively. The increase of $5.0 million $10.2 million was due to higher yields and a corresponding increase in the interest earned on our cash, cash equivalents and investments.

Liquidity and Capital Resources

To date, we have incurred significant net losses and negative cash flows from operations. As of June 30, 2023 September 30, 2023, we had $544.5 million $497.7 million in cash and cash equivalents and investments. We anticipate that the aggregate of our current cash and cash equivalents and investments available for operations will be sufficient to fund our operations for at least the next 12 months from the date this Quarterly Report on Form 10-Q is filed with the SEC.

Our operations have been financed primarily by net proceeds from the sale and issuance of our convertible preferred stock, the issuance of convertible promissory notes, net proceeds from our IPO, our at-the-market (ATM) offerings, our June 2020 underwritten public offering, and upfront cash payment of $40.0 million received in December 2020 pursuant to our License Agreement with Allogene Overland. In connection with our IPO in 2018, we sold an aggregate of 20,700,000 shares of our common stock (inclusive of 2,700,000 shares of common stock pursuant to the over-allotment option granted to the underwriters) at a price of $18.00 per share and received approximately $343.3 million in net proceeds. In November 2019, we entered into a sales agreement with Cowen and Company, LLC (Cowen), as amended on November 2, 2022 and November 2, 2023, under which we may from time to time issue and sell shares of our common stock through Cowen in ATM offerings for an aggregate offering price of up to $250.0 million. offerings. During the year ended December 31, 2019, we sold an aggregate of 1,965,082 shares of common stock in ATM offerings resulting in net proceeds of $54.2 million. During the year ended December 31, 2020, we sold an aggregate of 848,663 shares of common stock in ATM offerings resulting in net proceeds of $26.2 million. In June 2023, During the nine months ended September 30, 2023, we sold an aggregate of 20,288,330 20,894,565 shares of common stock in ATM offerings resulting in net proceeds of $87.9 million $91.1 million. As The specified dollar limit on the amount of June 30, 2023, $77.9 million remains available for sale common stock that may be sold under the sales agreement with Cowen. was removed pursuant to the November 2, 2023 amendment to the sales agreement.

In June 2020, we sold 13,457,447 shares of our common stock, which included 1,755,319 shares sold pursuant to the full exercise of the underwriters' option to purchase additional shares, in an underwritten public offering at a price of $47.00 per share, which resulted in net proceeds of approximately $595.7 million after deducting the underwriting discounts and commissions and other expenses.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Six Months Ended June 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In thousands)		(In thousands)	

Net cash (used in) provided by:	Net cash (used in) provided by:			Net cash (used in) provided by:			
Operating activities	Operating activities	$ (128,496)	$ (110,768)	Operating activities	$ (184,026)	$ (158,423)	
Investing activities	Investing activities	130,095	31,657	Investing activities	95,828	56,562	
Financing activities	Financing activities	91,255	1,838	Financing activities	95,540	2,904	
Net increase (decrease) in cash, cash equivalents and restricted cash	Net increase (decrease) in cash, cash equivalents and restricted cash	$ 92,854	$ (77,273)	Net increase (decrease) in cash, cash equivalents and restricted cash	$ 7,342	$ (98,957)	

Operating Activities

During the six nine months ended June 30, 2023 September 30, 2023, cash used in operating activities of $128.5 million $184.0 million was attributable to a net loss of $176.7 million $238.0 million, partially offset by non-cash charges of $45.2 million $65.9 million and an increase of $3.0 million $11.9 million in our net operating assets and liabilities. The non-cash charges consisted primarily of stock-based compensation expense of $35.4 million $50.7 million, depreciation of $7.2 million $10.7 million, our share of equity investments' net losses and impairment for the period of $2.9 million $7.5 million, net amortization and accretion on investment securities of $0.6 million $3.5 million, and non-cash rent expense of $0.4 million $0.5 million. The change in operating assets and liabilities was primarily due to a $5.6 $7.2 million increase decrease in accounts payable, a $7.1 million decrease in accrued and other current liabilities, a $0.6 million decrease in deferred revenue, and a $1.4 $0.4 million increase in other long-term assets, offset by a $3.6 million decrease in prepaid expenses and other current assets, offset by a $3.2 million decrease in accounts payable and a $0.7 million decrease in deferred revenue. assets.

During the six nine months ended June 30, 2022 September 30, 2022, cash used in operating activities of $110.8 million $158.4 million was attributable to a net loss of $154.6 million $237.8 million, partially offset by non-cash charges of $58.8 million $86.5 million and an increase of $14.9 million $7.1 million in our net operating assets and liabilities. The non-cash charges consisted primarily of stock-based compensation expense of $45.2 million $66.4 million, depreciation of $7.4 million $11.2 million, our share of equity investments' net losses for the period of $2.3 million $4.0 million, net amortization and accretion on investment securities of $2.2 million $2.7 million, and non-cash rent expense of $1.6 million $2.2 million. The change in operating assets and liabilities was primarily due to a $8.5 $3.2 million increase in other long-term assets, a $2.8 million increase in prepaid expenses and other current assets, a $3.3 $1.4 million decrease in accrued and other current liabilities, a $2.8 million increase in other long-term assets, and a $1.6 $2.1 million decrease in other long-term liabilities, offset by a $0.9 $1.9 million increase in accounts payable and a $0.4 $0.5 million increase in deferred revenue.

Investing Activities

During the six nine months ended June 30, 2023 September 30, 2023, net cash provided by investing activities of $130.1 million $95.8 million was related to cash provided by investment maturities of $296.3 million $461.5 million and cash provided by investment sales of $5.6 million, offset by cash used in purchases of investments of $170.5 million $369.9 million and cash used in the purchase of property and equipment of $1.3 million.

During the six nine months ended June 30, 2022 September 30, 2022, net cash provided by investing activities of $31.7 million $56.6 million was related to cash provided by investment maturities of $185.8 million $260.4 million, offset by cash used in purchases of investments of $150.9 million $200.3 million and cash used in the purchase of property and equipment of $3.3 million $3.5 million.

Financing Activities

During the six nine months ended June 30, 2023 September 30, 2023, cash provided by financing activities of $91.3 million $95.5 million was related to $87.9 million $91.1 million in net proceeds from the issuance of common stock through ATM transactions, $1.7 million $2.5 million of cash provided by the sale of common stock through our employee stock purchase plan, and $1.6 million $1.9 million of cash provided by the issuance of common stock upon exercise of stock options.

During the six nine months ended June 30, 2022 September 30, 2022, cash provided by financing activities of $1.8 million $2.9 million was related to $1.5 million $2.5 million of cash provided by the sale of common stock through our employee stock purchase plan and $0.3 million $0.4 million of cash provided by the issuance of common stock upon exercise of stock options.

Material Cash Commitments and Requirements

Our primary use of cash is for operating expenses, which consist primarily of clinical manufacturing and research and development expenditures related to our lead product candidates, other research efforts, and to a lesser extent, general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and accrued expenses and other current liabilities.

Our product candidates are still in the early stages of clinical and preclinical development and the outcome of these efforts is uncertain. Accordingly, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates or whether, or when, we may achieve profitability. Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity or debt financings and collaboration and license arrangements. If, and when, we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable to raise capital when needed, we will need to delay, reduce or terminate planned activities to reduce costs. Doing so will likely harm our ability to execute our business plans.

Our commitments primarily consist of obligations under our agreements with Pfizer, Cellectis, Servier and Notch. Under these agreements we are required to make milestone payments upon successful completion of certain regulatory and sales milestones on a target-by-target and country-by-country basis. The payment obligations under the license agreements are contingent upon future events such as our achievement of specified development, regulatory and commercial milestones and we will be required to make development milestone payments and royalty payments in connection with the sale of products developed under these agreements. As of June 30, 2023 September 30, 2023, we were unable to estimate the timing or likelihood of achieving the milestones or making future product sales. For additional information regarding our agreements, see Note 6 to our condensed consolidated financial statements included elsewhere in this report.

Our operating lease obligations primarily consist of lease payments on our research, lab and office facilities in South San Francisco, California, as well as lease payments on our cell manufacturing facility in Newark, California. For additional information regarding our lease obligations, see Note 7 to our condensed consolidated financial statements included elsewhere in this report.

Additionally, we have entered into agreements with third-party contract manufacturers for the manufacture and processing of certain of our product candidates for clinical testing purposes, and we have entered and will enter into other contracts in the normal course of business with contract research organizations for clinical trials and other vendors for other services and products for operating purposes. These agreements generally provide for termination or cancellation, other than for costs already incurred. As of June 30, 2023 September 30, 2023, we had non-cancellable purchase commitments of $0.4 $4.0 million.

On October 6, 2020, we announced we entered into a strategic five-year collaboration agreement with MD Anderson for the preclinical and clinical investigation of allogeneic CAR T cell product candidates. We and MD Anderson are collaborating on the design and conduct of preclinical and clinical studies with oversight from a joint steering committee. Under the terms of the agreement, we have committed up to $15.0 million of funding for the duration of the agreement. Payment of this funding is contingent on mutual agreement to study orders in order for any study to be included under the alliance. We made an upfront payment of $3.0 million to MD Anderson in the year ended December 31, 2020. and made an additional upfront payment of $3.0 million to MD Anderson in October 2023. We are obligated to make further payments to MD Anderson each year upon the anniversary of the agreement effective date through the duration of the agreement term. The agreement may be terminated by either party for material breach by the other party. Individual studies may be terminated for, among other things, material breach, health and safety concerns or where the institutional review board, the review board at the clinical site with oversight of the clinical study, requests termination of any study. Where any legal or regulatory authorization is finally withdrawn or terminated, the relevant study will also terminate automatically.

In July 2020, we entered into a Solar Power Purchase and Energy Services Agreement for the installation and operation of a solar photovoltaic generating system and battery energy storage system at our manufacturing facility in Newark, California. The agreement has a term of 20 years and commenced in September 2022. We are obligated to pay for electricity generated from the system at an agreed rate for the duration of the agreement term. Termination of the agreement by us will result in a termination payment due of approximately $4.3 million. In connection with the agreement, we maintain a letter of credit for the benefit of the service provider in the amount of $4.3 million.

We also have a Change in Control and Severance Plan that requires the funding of specific payments, if certain events occur, such as a change of control and the termination of employment without cause.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe that the assumptions and estimates associated with accrued research and development expenditures and stock-based compensation have the most significant impact on our condensed consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates.

There have been no significant changes in our critical accounting policies and estimates as compared to the critical accounting policies and estimates disclosed in the section titled "Management's Discussion and Analysis of Financial Condition and Operations" included in our Annual Report.

Recent Accounting Pronouncements

There have been no new accounting pronouncements issued or effective that are expected to have a material impact on our unaudited condensed financial statements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risks in the ordinary course of our business. These risks primarily relate to interest rate fluctuations.

Interest Rate Risk

Our cash and cash equivalents and investments of $544.5 million $497.7 million as of June 30, 2023 September 30, 2023 consist of bank deposits, money market funds and available-for-sale securities. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant for

us. A 10% change in the interest rates in effect on June 30, 2023 September 30, 2023 would not have had a material effect on the fair market value of our cash equivalents and available-for-sale securities.

Foreign Exchange Rate Risk

Our collaboration agreement with Servier requires collaboration payments for shared clinical development costs to be paid in Euros, and thus we face foreign exchange risk as a result of entering into transactions denominated in currencies other than U.S. dollars. Due to the uncertain timing of expected payments in foreign currencies, we do not utilize any forward exchange contracts. All foreign transactions settle on the applicable spot exchange basis at the time such payments are made. An adverse movement in foreign exchange rates could have an effect on payments due and made to our collaboration partner as well as other foreign suppliers and for license agreements. A 10% change in the applicable foreign exchange rates during the periods presented would not have had a material effect on our condensed consolidated financial statements. As of June 30, 2023 September 30, 2023, we had no receivables denominated in foreign currency.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation and supervision of our Chief Executive Officer and our Chief Financial Officer, have evaluated our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures were effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

We are in the process of implementing new enterprise resource planning software, SAP, as part of a plan to integrate and upgrade our systems and processes. The implementation of this software is scheduled to continue in phases over a number of years. During the first quarter of 2021, we migrated certain areas of our business to SAP, including financial reporting, asset management, procurement, clinical inventory and warehouse management. As the phased implementation of future modules occurs, we expect to experience certain changes to our processes and procedures which, in turn, result in changes to our internal control over financial reporting. While we expect SAP to strengthen our internal financial controls by automating certain manual processes and standardizing business processes and reporting, management will continue to evaluate and monitor our internal controls as processes and procedures in each of the affected areas evolve.

Other than as discussed above, no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the three months ended June 30, 2023 September 30, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II-OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may become involved in legal proceedings relating to claims arising from the ordinary course of business. Our management believes that there are currently no claims or actions pending against us, the ultimate disposition of which could have a material adverse effect on our results of operations, financial condition or cash flows.

Item 1A. Risk Factors

RISK FACTOR SUMMARY

Below is a summary of the material factors that make an investment in our common stock speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found below under the heading "Risk Factors" and should be carefully considered, together with other information in this Quarterly Report on Form 10-Q and our other filings with the Securities and Exchange Commission (SEC) before making investment decisions regarding our common stock.

- We have incurred net losses in every period since our inception and anticipate that we will incur substantial net losses in the future.
- Our engineered allogeneic T cell product candidates represent a novel approach to cancer treatment that creates significant challenges for us.
- Gene-editing is a relatively new technology, and if we are unable to use this technology in our intended product candidates, our revenue opportunities will be materially limited.
- We are heavily reliant on our partners for access to TALEN gene editing technology for the manufacturing and development of our product candidates.
- Servier's discontinuation of its involvement in the development of CD19 products and our disputes with Servier may have adverse consequences.
- Our product candidates are based on novel technologies, which makes it difficult to predict the time and cost of product candidate development and the likelihood of obtaining regulatory approval.

- Our business is highly dependent on the success of our lead product candidates. If we are unable to advance clinical development, obtain approval of and successfully commercialize our lead product candidates for the treatment of patients in approved indications, our business would be significantly harmed.
- Our product candidates may cause undesirable side effects or have other properties that have halted and could in the future halt their clinical development, prevent their regulatory approval, limit their commercial potential or result in significant negative consequences.
- Our clinical trials may fail to demonstrate the safety and efficacy of any of our product candidates, which would prevent or delay regulatory approval and commercialization.
- Phase 1 data from our clinical trials is limited and may change as more patient data become available.
- We may encounter substantial delays in our clinical trials, or may not be able to conduct our trials on the timelines we expect.
- If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.
- We may fail to successfully manufacture our product candidates, operate our own manufacturing facility, or obtain regulatory approval to utilize or commercialize from our manufacturing facility, which could adversely affect our clinical trials and the commercial viability of our product candidates.
- We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.
- We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.
- We will need substantial additional financing to develop our products and implement our operating plans. If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates.
- We rely and will continue to rely on third parties to conduct our clinical trials and manufacture our product candidates and critical raw materials. If these third parties do not successfully carry out their contractual duties

or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.

- We rely on T cells from healthy donors and other specialty raw materials to manufacture our product candidates, and if we do not obtain an adequate supply of T cells from qualified donors or other raw materials, development of those product candidates would be adversely impacted.
- The FDA may disagree with our regulatory plan and we may fail to obtain regulatory approval of our CAR T cell product candidates.
- We depend on intellectual property licensed from third parties and termination of any of these licenses could result in the loss of significant rights, which would harm our business.
- If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our market.

RISK FACTORS

An investment in shares of our common stock involves a high degree of risk. You should carefully consider the following risk factors, as well as the other information in this report, before deciding whether to purchase, hold or sell shares of our common stock. The occurrence of any of the following risks could harm our business, financial condition, results of operations and/or growth prospects or cause our actual results to differ materially from those contained in forward-looking statements we have made in this report and those we may make from time to time. You should consider all of the risk factors described below when evaluating our business. The risk factors set forth below that are marked with an asterisk (*) contain changes to the similarly titled risk factors included in, or that did not appear as separate risk factors in, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2022 (Annual Report), which was filed with the SEC on February 28, 2023.

Risks Related to Our Business and Industry

We have incurred net losses in every period since our inception and anticipate that we will incur substantial net losses in the future.*

We are a clinical-stage biopharmaceutical company and investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate efficacy or an acceptable safety profile, gain regulatory approval and become commercially viable. We are advancing an allogeneic CAR T platform of primarily early-stage product candidates and have no products approved for commercial sale and have not generated any revenue from product sales to date, and we will continue to incur significant research and development and other expenses related to our ongoing operations. As a result, we are not profitable and have incurred net losses in each period since our inception. For the year ended December 31, 2022, we reported a net loss of $332.6 million. For the six nine months ended June 30, 2023 September 30, 2023, we reported a net loss of $176.7 million $238.0 million. As of June 30, 2023 September 30, 2023, we had an accumulated deficit of $1.4 billion $1.5 billion.

We expect to incur significant expenditures for the foreseeable future, and we expect these expenditures to increase as we continue our research and development of, and seek regulatory approvals for, product candidates based on our engineered allogeneic T cell platform. Because our allogeneic T cell product candidates are based on new technologies and will require the creation of inventory of mass-produced, off-the-shelf product, they will require extensive research and development and have substantial manufacturing and processing costs. In addition, costs to treat patients with relapsed or refractory cancer and to treat potential side effects that may result from our product candidates can be significant.

We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. For instance, the FDA placed our clinical trials on hold in October 2021, which suspended our clinical programs prior to resolution of the hold in January 2022. Even if we succeed in advancing our clinical trials

and commercializing one or more of our product candidates, we will continue to incur substantial research and development and other expenditures to develop and market additional product candidates. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

Our engineered allogeneic T cell product candidates represent a novel approach to cancer treatment that creates significant challenges for us.

We are developing a pipeline of allogeneic T cell product candidates that are engineered from healthy donor T cells to express CARs and are intended for use in any patient with certain cancers. Advancing these novel product candidates creates significant challenges for us, including:

- manufacturing our product candidates to our or regulatory specifications and in a timely manner to support our clinical trials, and, if approved, commercialization;
- sourcing clinical and, if approved, commercial supplies for the raw materials used to manufacture our product candidates;
- understanding and addressing variability in the quality of a donor's T cells, which could ultimately affect our ability to produce product in a reliable and consistent manner and treat certain patients;
- educating medical personnel regarding the potential side effect profile of our product candidates, if approved, such as the potential adverse side effects related to cytokine release syndrome (CRS), neurotoxicity, graft-versus-host disease (GvHD), prolonged cytopenia, aplastic anemia and neutropenic sepsis;
- using medicines to preempt or manage adverse side effects of our product candidates and such medicines may be difficult to source or costly or may not adequately control the side effects and/or may have other safety risks or a detrimental impact on the efficacy of the treatment;
- conditioning patients with chemotherapy and ALLO-647 or other lymphodepletion agents in advance of administering our product candidates, which may be difficult to source, costly or increase the risk of infections and other adverse side effects;
- obtaining regulatory approval, as the FDA and other regulatory authorities have limited experience with development of allogeneic T cell therapies for cancer; and
- establishing sales and marketing capabilities upon obtaining any regulatory approval to gain market acceptance of a novel therapy.

Gene-editing is a relatively new technology, and if we are unable to use this technology in our intended product candidates, our revenue opportunities will be materially limited.*

Cellectis's TALEN technology involves a relatively new approach to gene editing, using sequence-specific DNA-cutting enzymes, or nucleases, to perform precise and stable modifications in the DNA of living-cells and organisms. Although Cellectis has generated nucleases for many specific gene sequences, it has not created nucleases for all gene sequences that we may seek to target, and Cellectis may not agree to or have difficulty creating nucleases for other gene sequences that we may seek to target, which could limit the usefulness of this technology. This technology may also not be shown to be effective in clinical studies that Cellectis, we or other licensees of Cellectis technology may conduct, or may be associated with safety issues that may negatively affect our development programs. For instance, gene-editing may create unintended changes to the DNA such as a non-target site gene-editing, a large deletion, or a DNA translocation, any of which could lead to oncogenesis. In our ALPHA2 trial, we observed a chromosomal abnormality, and the FDA placed our clinical trials on hold following this observation. While our investigation concluded that gene editing was not responsible for the chromosomal abnormality and the hold was resolved, we may discover future abnormalities caused by gene editing or other factors that would impact our development plans. The gene editing of our product candidates may also not be successful in limiting the risk of GvHD or premature rejection by the patient.

In addition, the gene-editing industry is rapidly developing, and our competitors may introduce new technologies that render our technology obsolete or less attractive. New technology could emerge at any point in the development cycle of our product candidates. As competitors use or develop new technologies, any failures of such technology could adversely impact our program. We also may be placed at a competitive disadvantage, and competitive pressures may force us to implement new technologies at a substantial cost. cost, and which would delay our development programs. In addition, our competitors may have greater financial, technical and personnel resources that allow them to enjoy technological advantages and may in the future allow them to implement new technologies before we can. We cannot be certain that we will be able to implement technologies on a timely basis or at a cost that is acceptable to us. If we are unable to maintain technological advancements consistent with industry standards, our operations and financial condition may be adversely affected.

We are heavily reliant on our partners for access to TALEN gene editing technology for the manufacturing and development of our product candidates.

A critical aspect to manufacturing allogeneic T cell product candidates involves gene editing the healthy donor T cells in an effort to avoid GvHD and to limit the patient's immune system from attacking the allogeneic T cells. GvHD results when allogeneic T cells start recognizing the patient's normal tissue as foreign. We use Cellectis's TALEN gene-editing technology to inactivate a gene coding for TCRα, a key component of the natural antigen receptor of T cells, to cause the engineered T cells to be incapable of recognizing foreign antigens. Accordingly, when injected into a patient, the intent is for the engineered T cell not to recognize the tissue of the patient as foreign and thus avoid attacking the patient's tissue. In addition, we use TALEN gene editing to inactivate the CD52 gene in donor T cells, which codes for the target of an anti-CD52 monoclonal antibody. Anti-CD52 monoclonal antibodies deplete CD52 expressing T cells in patients while sparing therapeutic allogeneic T cells lacking CD52. By administering an anti-CD52 antibody prior to infusing our product candidates, we believe we have the potential to reduce the likelihood of a patient's immune system from rejecting the engineered allogeneic T cells for a sufficient period of time to enable a window of persistence during which the engineered allogeneic T cells can actively target and destroy the cancer cells. However, the antibody may not have the benefits that we anticipate and could have adverse effects.

We rely on an agreement with Cellectis for rights to use TALEN technology for 15 select cancer targets, including BCMA, FLT3, CD70, DLL3, Claudin 18.2 and other targets included in our pipeline. We also rely on Cellectis, through our agreement with Servier, for rights to UCART19, ALLO-501 and ALLO-501A. Any other gene-editing technology used to research and develop product candidates directed at targets not covered by our existing agreements with Cellectis and Servier will require significant investment and time for advancement. In addition, the Cellectis gene-editing technology may fail to produce viable product candidates. Moreover, both Servier and Cellectis may terminate our respective agreements in the event of a material breach of the agreements, or upon certain insolvency events. Cellectis has challenged and may in the future challenge certain performance by Servier, such as its development of products licensed under the Cellectis-Servier Agreement in ALL, and any failure by those parties to resolve such matters may have an adverse impact on us. If our agreements were terminated or we required other gene editing technology, such a license or technology may not be available to us on reasonable terms, or at all, and advancing other gene editing technology would require significant resources.

Servier's Discontinuation discontinuation of its involvement in the development of CD19 Products and our Servier's disputes with Servier us and Cellectis may have adverse consequences.*

On September 15, 2022, Servier sent a notice of discontinuation (Discontinuation) of its involvement in the development of all CD19 Products pursuant to the Servier Agreement. Despite there being no obligation under the terms of the Servier Agreement to do so, Servier believes that we had to exercise the Ex-US Option within a limited timeframe that passed. Servier also communicated to us that it believes it does not have to contribute to development costs 90 days from its notice of discontinuation, pending our exercise of the Ex-US Option. We disagree with these assertions relating to both the maintenance of the Ex-US Option as well as contribution to development costs during our consideration of the Ex-US Option. Any failure of Servier to fulfill its obligations may be harmful to us.

Servier also licenses certain rights to the CD19 Products from Cellectis and sublicenses those rights to us. Cellectis has challenged certain performance by Servier and has also challenged the ability of Servier to grant a world-wide sublicense. sublicense pursuant to our Ex-US Option. Servier's Discontinuation and any subsequent actions may further strain our relationship with Servier, as well as the relationship relationships between Servier and Cellectis, as well as and between us and Cellectis. Any failure to resolve Cellectis challenges could impact our agreement with Servier and could have a significant adverse impact on our business, financial condition and prospects.

Additionally, in December 2022, Servier sent us a notice for material breach due to our purported refusal to allow an audit of certain manufacturing costs under our cost share arrangement. While we do not believe Servier has such an audit right, we submitted to a review of our manufacturing costs of CD19 Products to recover outstanding manufacturing costs owed by Servier to us. In July 2023, Servier sent us a second notice for material breach alleging that we overcharged Servier based on Servier and its accounting firm's review of costs eligible for cost-sharing under the Servier Agreement. We disagree with the material breach allegations and we are disputing such allegations. Absent a resolution between the parties, disputed matters may be resolved in arbitration as specified in the Servier Agreement. While we intend to vigorously pursue our rights and remedies to dispute Servier's allegations and enforce our contractual rights, any legal outcome is inherently uncertain, will add to our costs and divert management time. time, and could result in a termination of the Servier Agreement which would have a significant adverse impact on our business, financial condition, and prospects.

Our product candidates are based on novel technologies, which makes it difficult to predict the time and cost of product candidate development and the likelihood of obtaining regulatory approval.*

We have concentrated our research, development and manufacturing efforts on our engineered allogeneic T cell therapy and our future success depends on the successful development of this therapeutic approach. We are in the early stages of developing our platform and we have experienced significant development challenges, such as with the prior clinical hold by the FDA, and there can be no assurance that any development problems we have now or experience in the future will not cause significant delays or unanticipated costs, or that such development problems can be overcome. We may also experience delays in developing a sustainable, reproducible and scalable manufacturing process or transferring that process to commercial facilities or partners, which may prevent us from completing our clinical studies or commercializing our products on a timely or profitable basis, if at all. For instance, it will take additional time and expense to transfer any product manufacturing to CF1 and optimize manufacturing for our BCMA program, each of which may be further delayed if we are unable to meet regulatory conditions.

In addition, since we are in the early stages of clinical development, we do not know all the doses to be evaluated in pivotal trials or, if approved, commercially. Finding a suitable dose for our cell therapy product candidates as well as ALLO-647 may delay our anticipated clinical development timelines. In addition, our expectations with regard to our scalability and costs of manufacturing may vary significantly as we develop our product candidates and understand these critical factors.

We are also advancing product candidates against unexplored targets and with new technology. For example, in our TRAVERSE trial we are advancing ALLO-316 against a target, CD70, that has not been validated by any autologous CAR T therapies. ALLO-316 may have limited efficacy, even accounting for the selection of patients with CD70 positive tumors, or have off-target toxicities. Since CD70 is found on activated T and other immune cells, ALLO-316 may also cause fratricide resulting in the loss of ALLO-316 cells or may deplete host T or other immune cells increasing cells.This may increase the risk of prolonged blood cell count suppression cytopenia), (cytopenia) or other adverse events including infections or inflammatory conditions such as immune effector cell hemophagocytic lymphohistiocytosis-like syndrome (IEC-HS) or infections. , which has been experienced in the TRAVERSE trial.

The clinical study requirements of the FDA, European Medicines Agency (EMA) and other regulatory agencies and the criteria these regulators use to determine the safety and efficacy of a product candidate are determined according to the type, complexity, novelty and intended use and market of the potential products. The regulatory approval process for novel product candidates such as ours can be more complex and consequently more expensive and take longer than for other, better known or extensively studied pharmaceutical or other product candidates. We face additional challenges in obtaining regulatory approval for ALLO-647, which we use as part of our lymphodepletion regimen, and for which we would seek to obtain approval concurrently with approval of a CAR T cell product candidate. Approvals by the EMA and FDA for existing autologous CAR T therapies, such as Kymriah and Yescarta, may not be indicative of what these regulators may require for approval of our therapies. Also, while we expect reduced variability in our products candidates compared to autologous products, we do not have significant clinical data supporting any benefit of lower variability and the use of healthy donor material in our allogeneic CAR T product candidates may create separate product variability challenges for us. us, and we do not yet fully understand the impact of donor variability on clinical outcomes.

More generally, approvals by any regulatory agency may not be indicative of what any other regulatory agency may require for approval or what such regulatory agencies may require for approval in connection with new product candidates. Moreover, our product candidates may not perform successfully in clinical trials or may be associated with adverse events that distinguish them from the autologous CAR T therapies that have previously been approved. For instance, allogeneic product candidates may result in GvHD or chromosomal abnormalities not experienced with autologous products. Additionally, any Phase 2 trial results, such as in the ALPHA2 trial, may not be representative of Phase 1 results, which were based on limited patients. Even if we collect promising initial clinical data of our product candidates, longer-term data may reveal new adverse events or responses that are not durable. Unexpected clinical outcomes would significantly impact our business.

Our business is highly dependent on the success of our lead product candidates. If we are unable to advance clinical development, obtain approval of and successfully commercialize our lead product candidates for the treatment of patients in approved indications, our business would be significantly harmed.

Our business and future success depends on our ability to advance clinical development, obtain regulatory approval of, and then successfully commercialize, our lead product candidates. Because ALLO-501A, ALLO-316 and our BCMA program candidates are among the first allogeneic products to be evaluated in the clinic, the failure of any such product candidates, or the failure of other allogeneic T cell therapies, including for reasons due to safety, efficacy or durability, may impede our ability to develop our product candidates, and significantly influence physicians' and regulators' opinions in regard to the viability of our entire pipeline of allogeneic T cell therapies. For instance, all of our clinical trials were previously put on clinical hold due to an observation in the ALPHA2 trial. While the clinical hold has been resolved, we could be subject to a clinical hold in the future due to unexpected observations, adverse patient outcomes or other issues.

All of our product candidates, including our lead product candidates, will require additional clinical and non-clinical development, regulatory review and approval in multiple jurisdictions, substantial investment, access to sufficient commercial manufacturing capacity and significant marketing efforts before we can generate any revenue from product sales. In addition, because our other product candidates are based on similar technology as our lead product candidates, if any of the lead product candidates encounters additional safety issues, efficacy problems, manufacturing problems, developmental delays, regulatory issues or other problems, our development plans and business would be significantly harmed.

Our product candidates may cause undesirable side effects or have other properties that have halted and could in the future halt their clinical development, prevent their regulatory approval, limit their commercial potential or result in significant negative consequences.*

Future undesirable or unacceptable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authorities. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Approved autologous CAR T therapies and those under development have shown frequent rates of CRS, neurotoxicity, serious infections, prolonged cytopenia and hypogammaglobulinemia, hemophagocytic lymphohistiocytosis/macrophage activation syndrome (HLH/MAS) and adverse events have resulted in the death of patients. We expect similar have observed certain of these adverse events for our allogeneic CAR T product candidates. Other adverse events could also emerge in autologous CAR T therapies over time. For instance, patients who received an autologous anti-BCMA CAR T cell therapy have experienced neurocognitive and hypokinetic movement disorder with features of Parkinson's disease that emerged months after treatment and may have been due to BCMA expression within the brain. Our anti-BCMA product candidates have the risk of causing similar adverse events.

Our allogeneic CAR T cell product candidates may also cause unique adverse events related to the differences between the donor and patients, such as GvHD or infusion reactions. In addition, we utilize a lymphodepletion regimen, which generally includes fludarabine, cyclophosphamide and ALLO-647, that may cause serious adverse events. For instance, because the regimen will cause a transient and sometimes prolonged immune suppression, patients will have an increased risk of infection that may be unable to be cleared by the patient and ultimately lead to other serious adverse events or death. Our lymphodepletion regimen has caused and may also cause prolonged cytopenia and aplastic anemia. We are also exploring various dosing strategies for lymphodepletion in our clinical trials, such as higher and lower dosing including varying doses of ALLO-647 in combination with fludarabine the chemotherapy agents and/or cyclophosphamideand dosing with and without ALLO-647 or eliminating one or more of the agents, which may increase alter the risk of serious adverse events.events or have other undesirable outcomes such as a reduction of the efficacy of treatment.

In our and Servier's clinical trials of allogeneic CAR T product candidates, the most common severe or life-threatening adverse events resulted from cytokine release syndrome, serious infections, febrile neutropenia, prolonged cytopenia including prolonged pancytopenia, haemophagocytic lymphohistiocytosis, hypokalemia, multiple organ dysfunction syndrome, neutropenic sepsis and aplastic anemia. As reported, patients have died from adverse events and future patients may also experience toxicity resulting in death. For additional safety data, please see the section entitled "Business—Product Pipeline and Development Strategy" included in our Annual Report.

As we treat and re-treat more patients with our product candidates in our clinical trials, new less common side effects may also emerge. emerge or increased incidence of previously observed side effects may occur.There is a risk that the FDA may not agree that sufficient mitigating procedures are included in our protocols to address such side effects, and FDA may impose a clinical hold as it evaluates risks associated with such side effects and/or as we work with the agency to implement protocol amendments to appropriately manage such side effects.For instance, we observed a chromosomal abnormality that led to a previous clinical hold on our clinical trials. While our investigation concluded that the chromosomal abnormality had no clinical significance and was unrelated to our manufacturing process, our manufacturing process includes gene engineering by using lentivirus and TALEN nucleases that may in the future cause insertion, deletion, or chromosomal translocation that may result in allogeneic CAR T cells to proliferate uncontrollably and adverse events. In addition, we have observed liver enzyme elevations, including one adverse event – autoimmune hepatitis – that qualified as a dose-limiting toxicity in our TRAVERSE trial.

We may also combine the use of our product candidates with other investigational therapies that may cause separate adverse events or events related to the combination.

If unacceptable toxicities arise in the development of our product candidates, we could suspend or terminate our trials or the FDA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all targeted indications. Any data safety monitoring board may also suspend or terminate a clinical trial at any time on various grounds, including a finding that the research patients are being exposed to an unacceptable health risk, including risks inferred from other unrelated immunotherapy trials. Treatment-related side effects could also affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff, as toxicities resulting from T cell therapy are not normally encountered in the general patient population and by medical personnel. We have trained and expect to have to train medical personnel using CAR T cell product candidates to understand the side effect profile of our product candidates for both our clinical trials and upon any commercialization of any of our product candidates. Inadequate

training in recognizing or managing the potential side effects of our product candidates could result in patient deaths. Any of these occurrences may harm our business, financial condition and prospects significantly.

Our clinical trials may fail to demonstrate the safety and efficacy of any of our product candidates, which would prevent or delay regulatory approval and commercialization.

Before obtaining regulatory approvals for the commercial sale of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are both safe and effective for use in each target indication. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials, including in any post-approval studies.

There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy, insufficient durability of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that commence clinical trials are never approved as products.

In addition, for any trials that may be completed, we cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, approval of our product candidates may be significantly delayed, or we may be required to expend significant additional resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates.

Phase 1 data from our clinical trials is limited and may change as more patient data become available or may not be validated in any future or advanced clinical trial.

Data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Phase 1 results are preliminary in nature and should not be viewed as predictive of ultimate success. It is possible that such results will not continue or may not be repeated in any clinical trial of our product candidates. For instance, our Phase 2 ALPHA2 trial design is based on data from a limited number of patients treated with various doses of ALLO-501 or ALLO-501A manufactured using the Alloy process, and the larger Phase 2 ALPHA2 trial may not repeat the Phase 1 results. In addition, our experience with our CD19 and BCMA programs indicates that manufacturing can impact clinical outcomes. The manufacturing runs we have completed and tested in the clinic are limited across our product candidates and any manufacturing variability that impacts clinical outcomes would significantly harm our business and prospects. We may also fail to develop any optimized manufacturing processes for any of our programs. Ultimately, if we cannot manufacture our product candidates with consistent and reproducible product characteristics, our ability to develop and commercialize any product candidate would be significantly impacted.

Phase 1 trials of novel products also commonly include a dose exploration phase during which adverse effects of treatment may emerge at higher doses that are new, unexpected, or occur at higher-than-expected frequencies or severity and may limit our ability to develop such products in one or more target indications or patient populations. Similarly, in dose expansion phase, we may discover that adverse effects, either known or novel, may negatively impact the emerging overall benefit-risk profile of our product candidates and may lead to the discontinuation or other significant alteration to the development plan.

Preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, initial, interim and preliminary data should be viewed with caution until the final data are available. Adverse differences between preliminary or interim data and final data could significantly harm our business prospects.

We may not be able to submit INDs to commence additional clinical trials on the timelines we expect, and even if we are able to, the FDA may not permit us to proceed.

We plan to submit INDs for additional product candidates in the future. We cannot be sure that submission of an IND or IND amendment will result in the FDA allowing testing and clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such clinical trials. The manufacturing of allogeneic CAR T cell therapy remains an emerging and evolving field. Accordingly, we expect CMC related topics, including product specification, will be a focus of IND reviews, which may delay the clearance of INDs or IND amendments. For instance, if we introduce changes to the manufacturing of our product candidates, regulatory authorities may require additional studies or clinical data to support the changes, which could delay our clinical trial timelines. Additionally, even if such regulatory authorities agree with the design and implementation of the clinical trials set forth in an IND, IND amendment or clinical trial application, we cannot guarantee that such regulatory authorities will not change their requirements in the future.

In addition, we submitted a standalone cross-reference IND for ALLO-647, which is being used as part of lymphodepletion in all our clinical trials. While our IND has been accepted, we have to update the IND for any new IND or IND amendment relating to our allogeneic CAR T cell product candidates. Any regulatory issues related to the review of our ALLO-647 IND updates or to the development of ALLO-647 could delay development of our allogeneic CAR T cell product candidates and significantly affect our business.

We may encounter substantial delays in our clinical trials, or may not be able to conduct our trials on the timelines we expect.*

Clinical testing is expensive, time consuming and subject to uncertainty. We cannot guarantee that any clinical studies will be conducted as planned or completed on schedule, if at all. Even if our trials begin as planned, issues may arise that could suspend or terminate such clinical trials. A failure of one or more clinical studies can occur at any stage of testing, and our future clinical studies may not be successful. Events that may prevent successful or timely completion of clinical development include:

- inability to generate sufficient preclinical, toxicology or other in vivo or in vitro data to support the initiation of clinical studies;
- delays in sufficiently developing, characterizing, controlling or optimizing a manufacturing process suitable for clinical trials, including the validation and deployment of release assays;
- difficulty sourcing healthy donor material of sufficient quality and in sufficient quantity to meet our development needs;
- delays in developing suitable assays for screening patients for eligibility for trials with respect to certain product candidates;
- delays in reaching a consensus with regulatory agencies on study design;
- delays in reaching agreement on acceptable terms with prospective contract research organizations (CROs) and clinical study sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical study sites;
- delays in obtaining required institutional review board (IRB) approval at each clinical study site;

- imposition of a temporary or permanent clinical hold by regulatory agencies for a number of reasons, including after review of an IND application or amendment, or equivalent application or amendment; as a result of a new safety finding that presents uncertain or unreasonable risk to clinical trial participants; a negative finding from an inspection of our clinical study operations or study sites; developments on trials conducted by competitors for related technology that raises FDA concerns about risk to patients of the technology broadly; or if the FDA finds that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- delays in recruiting suitable patients to participate in our clinical studies;
- difficulty collaborating with patient groups and investigators;
- failure by our CROs, other third parties or us to adhere to clinical study requirements;
- failure to perform in accordance with the FDA's good clinical practice (GCP) requirements or applicable regulatory guidelines in other countries;
- delays or failures in the transfer of manufacturing processes to any contract manufacturing organization (CMO) or our own manufacturing facility or any other development or commercialization partner for the manufacture of product candidates;
- delays in having patients complete participation in a study or return for post-treatment follow-up;
- patients dropping out of a study;

- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- the cost of clinical studies of our product candidates being greater than we anticipate;

- clinical studies of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical studies or abandon product development programs;
- delays or failure to secure supply agreements with suitable raw material suppliers, or any failures by suppliers to meet our quantity or quality requirements for necessary raw materials; and
- delays in manufacturing, testing, releasing, validating, or importing/exporting sufficient stable quantities of our product candidates for use in clinical studies or the inability to do any of the foregoing.

A pandemic, epidemic or future resurgences of COVID-19 may also increase the risk of certain of the events described above and delay our development timelines. Any inability to successfully complete preclinical and clinical development could result in additional costs to us or impair our ability to generate revenue. In addition, in order to transition manufacturing of certain of our product candidates from our CMO to our manufacturing facility, we will be required to meet certain regulatory conditions, such as establishing comparability with the product candidates manufactured at our CMO, and our inability to meet such conditions would result in investment of additional resources, a delay in using our manufacturing facility for production and extend our clinical trial timelines. Similar conditions may apply if we make manufacturing or formulation changes to our product candidates. Clinical study delays could also shorten any periods during which our products have patent protection and may allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

Monitoring and managing toxicities in patients receiving our product candidates is challenging, which could adversely affect our ability to obtain regulatory approval and commercialize.

For our clinical trials of our product candidates, we contract or will contract with academic medical centers and hospitals experienced in the assessment and management of toxicities arising during clinical trials. Nonetheless, these centers and hospitals may have difficulty observing patients and treating toxicities, which may be more challenging due to personnel changes, inexperience, shift changes, house staff coverage or related issues. This could lead to more severe or prolonged toxicities or even patient deaths, which could result in us or the FDA delaying, suspending or terminating one or more of our clinical trials, and which could jeopardize regulatory approval. We also expect the centers using our product candidates, if approved, on a commercial basis could have similar difficulty in managing adverse events. Medicines used at centers to help manage adverse side effects of our product candidates may not adequately control the side effects and/or may have a detrimental impact on the efficacy of the treatment. Use of these medicines may increase with new physicians and centers administering our product candidates.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons. For example, as we progress the ALPHA2 and EXPAND trials, we may face enrollment challenges, including an unwillingness of sites to participate, the exclusion of patients with certain disease characteristics or the ineligibility of patients that have received prior autologous CAR T therapies, which continue to gain adoption. Additionally, it may be difficult to enroll the EXPAND trial as some clinical trial sites have declined to participate in the randomized design. The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients. The COVID-19 pandemic, including the travel and business restrictions imposed by government authorities in response to the pandemic, resulted in, and a resurgence of COVID-19 or future epidemics or pandemics may result in, reduced enrollment and challenges to related clinical trial activities. The enrollment of patients may be more difficult, such as due to the perceptions of the safety of our clinical trials due to the previous clinical hold, and will depend on many factors, including:

- the patient eligibility criteria defined in the protocol;

- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity of patients to study sites;

- the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- our ability to obtain and maintain patient consents;
- the competition from approved products in the same or other lines of therapy and and/or disease indication indications and from product candidates in other clinical trials; and

- the risk that patients enrolled in clinical trials will drop out of the trials before the infusion of our product candidates or trial completion.

Since we only need to conduct a limited number of manufacturing runs to generate clinical supply, the diversity of our supply is limited during clinical trials. As a result, some patients may have antibodies to certain donor specific antigens at titers that could negatively impact the activity of our product candidates and which would render the patients ineligible for treatment. Furthermore, cellular mechanisms of allogeneic tissue rejection may limit the efficacy of our products. In addition, we have introduced an IVD assay in the TRAVERSE trial to screen for patients with CD70+ tumors, which is restricting the number of patients eligible for the trial.

Development and research use of an experimental diagnostic assay or test, such as that we are using to determine CD70 expression on tumor tissue of potential participants in the TRAVERSE trial, may influence results of the study in expected or unexpected ways. For example, emerging safety and efficacy outcomes could lead us to impose, tighten or expand "cutoff" values of CD70 expression to determine enrollment eligibility. This may reduce the pace of enrollment or may lead to alterations in the expected benefit risk profile as compared to results collected prior to the change to the cutoff value. The diagnostic assay itself may not perform as expected due to identifiable or obscure factors. It is also possible that we may not be aware of such underperformance of the assay which could lead to incorrect conclusions about the expression of the molecule on tumor tissue. This could, in turn, impact enrollment and interpretation of the clinical trial results.

Our clinical trials will also compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition will reduce the number and types of patients available to us because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, some of our clinical trial sites are also being used by some of our competitors, which may reduce the number of patients who are available for our clinical trials in that clinical trial site.

As our clinical trials require conditioning patients with chemotherapy, including agents such as cyclophosphamide and fludarabine, and physicians use other drugs prophylactically or to manage adverse events, our ability to enroll may be impacted by the shortage of such agents or drugs. For instance, the FDA has reported a shortage of fludarabine and any failure or delays by us or by our clinical trial sites to obtain sufficient quantities of fludarabine may delay our ability to enroll and treat patients in our clinical trials.

Moreover, because our product candidates represent a departure from more commonly used methods for cancer treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy, monoclonal antibodies, hematopoietic cell transplantation as well as autologous CAR T cell therapies, rather than enroll patients in our clinical trial, including if our product candidates have or are perceived to have additional safety or efficacy risks or if using our product candidates may affect insurance coverage of conventional therapies. For instance, the development of autologous CAR T cell therapies continues to rapidly advance, including into earlier lines of treatment of LBCL and treatment of R/R multiple myeloma, as described under the section entitled "Business—Competition" included in our Annual Report. We also may experience risks associated with a new class of therapies, bispecific antibodies, which have been approved for multiple myeloma and LBCL. The compelling results and related approvals impact our ability to enroll patients with R/R multiple myeloma or R/R LBCL in our clinical trials. Moreover, patients eligible for allogeneic CAR T cell therapies but ineligible for autologous CAR T cell therapies due to aggressive cancer and inability to wait for autologous CAR T cell therapies may be at greater risk for complications and death from therapy or may experience a reduction in efficacy as compared to patients who are well enough and whose disease is sufficiently slow growing as to be eligible for autologous CAR T cell therapy.

Delays in patient enrollment may result in increased costs or may affect the timing or outcome of our clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our product candidates.

The market opportunities for our product candidates may be limited to those patients who are ineligible for or have failed prior treatments and may be small.*

The FDA often approves new therapies initially only for use in patients with R/R metastatic disease. We expect to initially seek approval of our product candidates in this setting. Subsequently, for those products that prove to be sufficiently beneficial, if any, we would expect to seek approval in earlier lines of treatment. There is no guarantee that our product candidates, even if approved, would be approved for earlier lines of therapy, and, prior to any such approvals, we will have to conduct additional clinical trials, including potentially comparative trials against approved therapies. We are also targeting a similar patient population as autologous CAR T product candidates, including approved autologous CAR T products. Our

therapies may not be as safe and effective as autologous CAR T therapies and may only be approved for patients who are ineligible for autologous CAR T therapy.

Our projections of both the number of patients who have the cancers we are targeting, as well as the subset of patients with these cancers in a position to receive second or later lines of therapy and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research and may prove to be incorrect. Further, new studies or therapies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for our product candidates may be limited, such as due to the eligibility criteria of our trials, or may not be amenable to treatment with our product candidates. For instance, we expect ALLO-501A to initially target a small patient population that suffers from R/R NHL. Even if we obtain significant market share for our product candidates, because the potential target populations are small, we may never achieve profitability without obtaining regulatory approval for additional indications.

Our development strategy relies on incorporating an anti-CD52 monoclonal antibody as part of the lymphodepletion preconditioning regimen prior to infusing allogeneic CAR T cell product candidates.*

We utilize an anti-CD52 monoclonal antibody as part of a lymphodepletion regimen to be infused prior to infusing our product candidates. While we believe an The anti-CD52 antibody may be able to reduce the likelihood of a patient's immune system rejecting the engineered allogeneic T cells for a sufficient period of time to enable a window of persistence during which such engineered allogeneic T cells can actively target and destroy cancer cells, cells. However, the antibody may not have the benefits that we anticipate and could have adverse effects. For instance, our lymphodepletion regimen, including using an anti-CD52 antibody, will cause immune suppression that can be of unpredictable depth and duration and that may be associated with an increased risk of infection, such as to common viral or bacterial or opportunistic pathogens, that may be unable to be cleared and ultimately lead to other serious adverse events or death.

In the prior CALM and PALL trials, a commercially available monoclonal antibody, alemtuzumab, that binds CD52 was used. Alemtuzumab is known to have risk of causing certain adverse events. In 2020, the EMA completed a pharmacovigilance review of alemtuzumab in the context of the treatment of multiple sclerosis following reports of immune-mediated conditions and problems affecting the heart and blood vessels, including fatal cases. The EMA recommended that alemtuzumab should not be used in patients with certain heart, circulation or bleeding disorders or in patients who have autoimmune disorders other than multiple sclerosis. The EMA also recommended that alemtuzumab only be given in a hospital with ready access to intensive care facilities and specialists who can manage serious adverse reactions. Based on The use of our anti-CD52 antibody may result in the recommendations, same or similar adverse events as alemtuzumab, and we have added relevant new safety information chosen to certain of administer our clinical trial documentation, including informed consent forms. Our product candidates will also continue to be administered at specialized centers, which are experienced at managing patients with advanced malignancies as well as toxicities associated with immunomodulatory therapies. We will continue therapies, which significantly limits the sites that are eligible to monitor any new safety information that will be reported or added to the product labels of alemtuzumab. participate in our clinical trials. If the EMA or other regulatory agencies further limit the use of alemtuzumab or anti-CD52 antibodies, our clinical program would be adversely affected.

To secure our own readily available source of anti-CD52 antibody, we are developing our own monoclonal anti-CD52 antibody, ALLO-647, which we use in our clinical trials. ALLO-647 may cause serious adverse events that alemtuzumab may cause, including fatal adverse events, infusion related reactions, immune thrombocytopenia, glomerular nephropathies, thyroid disorders, autoimmune cytopenias, autoimmune hepatitis, hemophagocytic lymphohistiocytosis, acquired hemophilia, infections, stroke, and progressive multifocal leukoencephalopathy. In addition, we are exploring various dosing strategies for lymphodepletion in our clinical trials, such as higher and lower dosing including varying doses of the chemotherapy agents and/or ALLO-647 in combination with fludarabine and cyclophosphamide, or eliminating one or more of the agents, which may increase alter the risk of serious adverse events. events or have other undesirable outcomes such as a reduction of the efficacy of treatment. Additionally, our experimental lymphodepletion regimens may show different safety profiles when paired with different allogeneic CAR T product candidates such that regimens deemed safe with one CAR T product candidate may be determined to be associated with unacceptable toxicity when combined with another CAR T candidate or with the same candidate in a different patient population. If observed, these differences may require additional clinical exploration and may cause delays in the execution or termination of development campaigns. See the section entitled "Business—Product Pipeline and Development Strategy" included in our Annual Report for information on safety events.

If we are unable to successfully develop and manufacture ALLO-647 in the timeframe we anticipate, or at all, such as if regulatory authorities do not agree with our selected dose or approve of the use of ALLO-647 in combination with our allogeneic T cell product candidates, our clinical trial timelines and ability to commercialize any of our product candidates would be significantly delayed.

We may fail to successfully manufacture our product candidates, operate our own manufacturing facility, or obtain regulatory approval to utilize or commercialize from our manufacturing facility or at a CMO, which could adversely affect our clinical trials and the commercial viability of our product candidates.*

We may not be able to achieve clinical or commercial manufacturing of our products on our own or at a CMO, including the inability to satisfy demands for any of our product candidates. While we believe the manufacturing and processing approaches are appropriate to support our clinical product development, we We have limited experience in managing the allogeneic T cell engineering process, and our allogeneic processes may be more difficult or more expensive than the approaches taken by our competitors. Until we complete our clinical trials, we cannot be sure that the manufacturing processes employed by us or the technologies that we incorporate for manufacturing will result in consistent T cell production that will be safe and effective.

We operate a manufacturing facility located in Newark, California that is designed to support clinical trial and potential commercial production and worldwide distribution of allogeneic CAR T cell products for blood cancers and solid tumors. We decided to initiate the Phase 2 trial of ALLO-501A with material manufactured utilizing the Alloy process at our CMO, rather than material manufactured at our manufacturing facility that did not use the Alloy process. Introducing any product manufactured at our manufacturing facility into an ongoing clinical trial would be subject to FDA review, and may result in increased costs and delays in conducting such trial, submitting a biologics license application (BLA)

and/or gaining FDA approval. Similar conditions may apply if we make process changes to our product candidates, as we plan to do for our BCMA program. In addition, any process or raw material change could introduce unacceptable product variability and impact our ability to manufacture on a consistent and reproducible basis. Ultimately, any failure or delays in manufacturing and qualification of our product candidates at our CMO or at our own manufacturing facility could delay our clinical trials.

We do not yet have sufficient information to reliably estimate the cost of the commercial manufacturing of our product candidates, and the actual cost to manufacture our product candidates could materially and adversely affect the commercial viability of our product candidates. The commercial dose and treatment regimen may affect our ability to scale and will affect our cost per dose. For instance, because our anti-BCMA product candidates may require a higher dose than ALLO-501A, it is possible that it may be more difficult to scale production of our anti-BCMA product candidates to meet demand. As a result, we may never be able to develop a commercially viable product. Our manufacturing facility will also require FDA approval before it can be used for commercial production, which we may never obtain. Even if approved, we would be subject to ongoing periodic unannounced inspection by the FDA, EMA, the Drug Enforcement Administration and corresponding state agencies to ensure strict compliance with cGMP, and other government regulations.

The manufacture of biopharmaceutical products is complex and requires significant expertise, including the development of advanced manufacturing techniques and process controls. Manufacturers of cell therapy products often encounter difficulties in production, particularly in validating initial production and ensuring the absence of contamination. Other problems can include difficulties with production costs and yields, quality control, including stability of the product, operator error, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. The application of new regulatory guidelines or parameters, such as those related to release testing, may also adversely affect our ability to manufacture our product candidates. Furthermore, if contaminants are discovered in our supply of product candidates or in the manufacturing facilities, such supply may have to be discarded and our manufacturing facility may need to be closed for an extended period of time to investigate and remedy the contamination. We cannot assure you that any stability or other issues relating to the manufacture of our product candidates will not occur in the future.

We or any of our vendors may fail to manage the logistics of storing and shipping our raw materials and product candidates. Storage failures and shipment delays and problems caused by us, our vendors or other factors not in our control, such as weather, could result in the inability to manufacture product, the loss of usable product or prevent or delay the delivery of product candidates to patients.

We may also experience manufacturing difficulties due to resource constraints or as a result of labor disruptions, such as due to a future COVID-19 resurgence, or disputes. If we were to encounter any of these difficulties, our ability to provide our product candidates to patients would be jeopardized.

As a company, we have no experience in marketing products. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, we may not be able to generate product revenue.

As a company, we have no experience in marketing products. We intend to develop an in-house marketing organization and sales force, which will require significant capital expenditures, management resources and time. We will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel.

If we are unable or decide not to establish internal sales, marketing and distribution capabilities, we will pursue collaborative arrangements regarding the sales and marketing of our products; however, there can be no assurance that we will be able to establish or maintain such collaborative arrangements, or if we are able to do so, that they will have effective sales forces or be on favorable terms. Any revenue we receive will depend upon the efforts of such third parties, which may not be successful. We may have little or no control over the marketing and sales efforts of such third parties and our revenue from product sales may be lower than if we had commercialized our product candidates ourselves. We also face competition in our search for third parties to assist us with the sales and marketing efforts of our product candidates.

There can be no assurance that we will be able to develop in-house sales and distribution capabilities or establish or maintain relationships with third-party collaborators to commercialize any product that receives regulatory approval in the United States or in other markets.

A variety of risks associated with conducting research and clinical trials abroad and marketing our product candidates internationally could materially adversely affect our business.

We plan to globally develop our product candidates. In addition, our enrollment timelines for ALLO-501A depend on initiating clinical trial sites outside of the United States. Accordingly, we expect that we will be subject to additional risks related to operating in foreign countries, including:

- differing regulatory requirements in foreign countries;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements;
- differing standards and privacy requirements for the conduct of clinical trials;
- increased difficulties in managing the logistics and transportation of storing and shipping product candidates produced in the United States and shipping the product candidate to the patient abroad;
- import and export requirements and restrictions;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;

- workforce uncertainty in countries where labor unrest is more common than in the United States;
- differing payor reimbursement regimes, governmental payors or patient self-pay systems, and price controls;
- potential liability under the Foreign Corrupt Practices Act of 1977 or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad;
- challenges with obtaining any local supply of drugs or agents used with our product candidates, which are required by certain local clinical trial sites before conducting any study; and
- business interruptions resulting from resurgences of COVID-19 or future health epidemics or pandemics, or natural or man-made disasters, including earthquakes, tsunamis, fires or other medical epidemics, or geo-political actions, including war and terrorism.

These and other risks associated with our collaborations with Servier and Cellectis, each based in France, our collaboration with Notch Therapeutics Inc. (Notch), based in Canada, and our joint venture for China, Taiwan, South Korea and Singapore with Overland Pharmaceuticals (CY) Inc., may materially adversely affect our ability to attain or maintain profitable operations.

We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The biopharmaceutical industry, and the immuno-oncology industry specifically, is characterized by intense competition and rapid innovation. Our competitors may be able to develop other compounds or drugs that are able to achieve similar or better results. Our potential competitors include major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies and universities and other research institutions. Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations and well-established sales forces. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors, either alone or with collaborative partners, may succeed in developing, acquiring or licensing on an exclusive basis drug or biologic products that are more effective, safer, more easily commercialized or less costly than our product candidates or may develop proprietary technologies or secure patent protection that we may need for the development of our technologies and products.

Specifically, engineered T cells face significant competition from multiple companies. Success of other therapies could impact our regulatory strategy and delay or prevent regulatory approval of our product candidates. Even if we obtain regulatory approval of our product candidates, the availability and price of our competitors' products could limit the demand and the price we are able to charge for our product candidates. We may not be able to implement our business plan if the acceptance of our product candidates is inhibited by price competition or the reluctance of physicians to switch from existing methods of treatment to our product candidates, or if physicians switch to other new drug or biologic products or choose to reserve our product candidates for use in limited circumstances. For additional information regarding our competition, see the section entitled "Business—Competition" included in our Annual Report.

We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.*

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract and retain highly qualified managerial, scientific, medical and other personnel. We are highly dependent on our management, including our Executive Chair, our President and Chief Executive Officer, our Executive Vice President, Research & Development and Chief Medical Officer, and our Executive Vice President, Chief Technical Officer. Our General Counsel and Officer, our Chief Financial Officer, resigned effective March 31, 2023 and August 2, 2023, respectively, and we are currently recruiting for their replacements. our General Counsel. The loss of the services of any of our executive officers, other key employees, and other scientific and medical advisors, and our inability to find suitable replacements could result in delays in product development and harm our business.

We conduct substantially all of our operations at our facilities in the San Francisco Bay area. This region is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel in our market is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all. Attrition may lead to higher costs for hiring and retention, diversion of management time to address retention matters and disrupt the business.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided stock options and restricted stock unit (RSU) awards that vest over time. The value to employees of stock options and RSU awards that vest over time have been significantly affected by movements in our stock price that are beyond our control and may at any time be insufficient to counteract more lucrative offers from other companies. While we We completed an option exchange program in July 2022 to alleviate the significant number of employee options that are were underwater at that time. Our stock price has significantly declined since the option exchange program excluded certain senior officers and new a significant number of our employee options granted under remain underwater and may not provide the program will only have value intended incentive for employees if to remain at our stock price increases over time. company. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. Although we have employment agreements with our key employees, these employment agreements provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice. We do not maintain "key person" insurance policies on the lives of these individuals or the lives of any of our other employees.

Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level and senior managers as well as junior, mid-level and senior scientific and medical personnel.

We have grown rapidly and will need to manage the size of our organization as we continue to advance our product candidates.*

As our development, manufacturing and commercialization plans and strategies develop, we have grown our employee base and allocated resources to multiple new functions. As our product candidates advance toward commercialization, we expect to hire employees in areas that include sales and marketing. Future growth imposes significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining and motivating additional employees;
- managing our internal development efforts effectively, including the clinical and FDA review process for our product candidates, while complying with our contractual obligations to contractors and other third parties; and
- improving our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to commercialize our product candidates will depend, in part, on our ability to effectively manage our growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants. There can be no assurance that the services of independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. We may also be subject to penalties or other liabilities if we mis-classify employees as consultants. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval of our product candidates or otherwise advance our business. There can be no assurance that we will be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, or at all.

If we are not able to effectively expand our organization by hiring and retaining employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop, manufacture and commercialize our product candidates and, accordingly, may not achieve our research, development, manufacturing and commercialization goals. Conversely, if we expand ahead of our business progress, we may take on unnecessary costs.

We may form or seek additional strategic alliances or enter into additional licensing arrangements in the future, and we may not realize the benefits of such alliances or licensing arrangements.

We may form or seek additional strategic alliances, create joint ventures or collaborations or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business. In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy. Any delays in entering into new strategic partnership agreements related to our product candidates could delay the development and commercialization of our product candidates in certain geographies for certain indications, which would harm our business prospects, financial condition and results of operations.

If we license products or new technologies or acquire businesses, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture. For instance, our agreements with Cellectis, Servier, Notch and Antion require significant research and development that may not result in the development and commercialization of product candidates. We cannot be certain that, following a strategic transaction or license, we will achieve the results, revenue or specific net income that justifies such transaction.

We may not realize the benefits of acquired assets or other strategic transactions.*

We actively evaluate various strategic transactions on an ongoing basis. We may acquire other businesses, products or technologies as well as pursue joint ventures or investments in complementary businesses. The success of our strategic transactions, including our acquisition of CAR T cell assets from Pfizer, licenses with Cellectis, Servier, Notch, Antion, and our joint venture with Overland Pharmaceuticals (CY) Inc. and any future strategic transactions depends on the risks and uncertainties involved including:

- technical difficulties associated with advancing partnered programs;
- unanticipated liabilities related to acquired companies or joint ventures;
- difficulties integrating acquired personnel, technologies and operations into our existing business;
- retention of key employees;

- managerial challenges associated with the oversight of partnered programs;
- costs and uncertainties related to managing disputes with any strategic partners;
- increases in our expenses and reductions in our cash available for operations and other uses;
- inability of our strategic partners to access suitable capital;
- disruption in or termination of our relationships with collaborators or suppliers as a result of such a transaction; and
- possible write-offs or impairment charges relating to acquired businesses or joint ventures.

If any of these risks or uncertainties occur, we may not realize the anticipated benefit of any acquisition or strategic transaction.

Additionally, foreign acquisitions and joint ventures are subject to additional risks, including those related to integration of operations across different cultures and languages, currency risks, potentially adverse tax consequences of overseas operations and the particular economic, political and regulatory risks associated with specific countries. For instance, our joint venture with Overland Pharmaceuticals (CY) Inc. has faced challenges relating to the regulatory and competitive environment in China for allogeneic CAR T products, as well as challenges within the capital markets for financing allogeneic CAR T development. Our joint venture may face manufacturing difficulties, manufacturing, such as from changes in raw materials or processes due to local regulations, or delivering our licensed product candidates in China, Taiwan, South Korea or Singapore, which could prevent any development or commercialization of our licensed product candidates in the region. The joint venture will also require significant operational and financial support in the future by us or third parties, and any future financing of the joint venture would increase our expenses or dilute our ownership in the joint venture. We may also face unknown liabilities due to supporting our joint venture, such as due to any misuse of materials supplied to our joint venture.

Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition.

We will need substantial additional financing to develop our products and implement our operating plans. If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates.*

We expect to spend a substantial amount of capital in the development and manufacture of our product candidates. We will need substantial additional financing to develop our products and implement our operating plans. In particular, we will require substantial additional financing to enable commercial production of our products and initiate and complete registrational trials for multiple products in multiple regions. Further, if approved, we will require significant additional capital in order to launch and commercialize our product candidates.

As of June 30, 2023 September 30, 2023, we had $544.5 million $497.7 million in cash and cash equivalents and investments. Changing circumstances may cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. We may also need to raise additional capital sooner than we currently anticipate if we choose to expand more rapidly than we presently plan. In any event, we will require additional capital for the further development and commercialization of our product candidates, including funding our internal manufacturing capabilities.

We cannot be certain that additional funding will be available on acceptable terms, or at all. We have no committed source of additional capital and our stock price has faced extreme volatility. volatility and has declined. To the extent that we raise additional capital through the sale of equity or convertible debt securities or to the extent that we may issue equity securities in connection with a strategic transaction, the ownership interest of our stockholders will be diluted. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our product candidates or other research and development initiatives. Our license agreements may also be terminated if we are unable to meet the payment obligations under the agreements. We could be required to seek collaborators for our product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available or relinquish or license on unfavorable terms our rights to our product candidates in markets where we otherwise would seek to pursue development or commercialization ourselves.

Any of the above events could significantly harm our business, prospects, financial condition and results of operations and cause the price of our common stock to decline.

If our security measures, or those of our CROs, CMOs, collaborators, contractors, consultants or other third parties upon whom we rely, are compromised or the security, confidentiality, integrity or availability of our information technology, software, services, networks, communications or data is compromised, limited or fails, we could experience a material adverse impact.*

In the ordinary course of our business, we may collect, process, receive, store, use, generate, transfer, disclose, make accessible, protect, secure, dispose of, transmit, and share (collectively, processing) proprietary, confidential and sensitive information, including personal data (including health information), intellectual property, trade secrets, information we collect about patients in connection with clinical trials, and proprietary business information owned or controlled by ourselves or other parties. parties (collectively, sensitive information). We rely upon certain third parties, such as CROs and CMOs, to process our proprietary, confidential and sensitive information. We may also share or receive sensitive information with our partners, CROs, CMOs, or other third parties. Our ability to monitor these third parties' information security practices is limited, and these third parties may not have adequate information security measures in place. If we (or a third party upon whom we rely) experience a security incident or are perceived to have experienced a security incident, we may also experience adverse consequences.

Our internal computer information technology systems and those of our CROs, CMOs, collaborators, contractors, consultants or other third parties are vulnerable to damage from computer viruses, unauthorized access, cybersecurity threats, and telecommunication and electrical failures. In addition, as many of our employees work from home at least part of the time and utilize network connections outside our premises, at home, or in transit, this poses increased risks to our information technology systems and data. Cyberattacks, malicious internet-based activity, and online and offline fraud and other similar activities threaten the confidentiality, integrity, and availability of our sensitive information and information technology systems, and those of the third parties upon which we rely. Such threats are prevalent and are increasing in their frequency, sophistication and intensity, and have become increasingly difficult to detect. These threats come from a variety of sources, including traditional computer "hackers," "hacktivists," organized

criminal threat actors, threat actors, personnel (such as through theft or misuse), sophisticated nation-states, and nation-state-supported actors. Some actors now engage and are expected to continue to engage in cyber-attacks, including without limitation nation-state actors for geopolitical reasons and in conjunction with military conflicts and defense activities. During times of war and other major conflicts, we, and the third parties upon which we rely, may be vulnerable to a heightened risk of these attacks, including retaliatory cyber-attacks, that could materially disrupt our systems and operations, supply chain, and ability to produce and distribute our product candidates. We and the third parties upon which we rely are subject to a variety of evolving threats, including social-engineering attacks (including through deep fakes, which may be increasingly more difficult to identify as fake, and phishing attacks), malicious code (such as viruses and worms), malware (including as a result of advanced persistent threat intrusions), denial-of-service (such as credential stuffing), stuffing attacks, credential harvesting, social engineering attacks (including through phishing attacks), viruses, ransomware, supply chain attacks, personnel misconduct or error, attacks enhanced or facilitated by AI, and other similar threats. We may also be the subject of software bugs, server malfunction, software or hardware failures, loss of data or other information technology assets, adware, telecommunications failures or other similar issues. In particular, ransomware attacks are becoming increasingly prevalent and severe and can lead to significant interruptions, delays, or outages in our operations, disruptions to our clinical trials, loss of data (including data related to clinical trials), significant expense to restore data or systems, reputational loss and the diversion of funds. Extortion payments may alleviate the negative impact of a ransomware attack, but we may be unwilling or unable to make such payments due to, for example, applicable laws or regulations prohibiting such payments. Similarly, supply chain attacks have increased in frequency and severity, and we cannot guarantee that third parties and infrastructure in our supply chain have not been compromised or that they do not contain exploitable defects or bugs that could result in a breach to our information technology systems or the third-party information technology systems that support us and our services. Future or past business transactions (such as acquisitions or integrations) could expose us to additional cybersecurity risks and vulnerabilities, as our systems could be negatively affected by

vulnerabilities present in acquired or integrated entities' systems and technologies. Furthermore, we may discover security issues that were not found during due diligence of such acquired or integrated entities, and it may be difficult to integrate companies into our information technology environment and security program.

Any of the previously identified or similar threats could cause a security incident or other interruption. A security incident or other interruption could result in unauthorized, unlawful, or accidental acquisition, modification, destruction, loss, alteration, encryption, disclosure of, or access to our sensitive information. A security incident or other interruption could disrupt our ability (and that of third parties upon whom we rely) to manufacture or deliver our product candidates.

We may expend significant resources, or modify our business activities and operations, including our clinical trial activities, in an effort to protect against security incidents. Certain data privacy and security obligations may require us to implement and maintain specific security measures or use industry-standard or reasonable security measures to protect our information technology systems and sensitive information.

Although we have implemented security measures designed to protect against security incidents, there can be no assurance that these measures will be effective. We have experienced attempts to compromise our information technology systems or otherwise cause a security incident, but, to our knowledge, such attempts have been unsuccessful. In addition, from time to time, our vendors inform us of security incidents. To date, our review of such incidents as reported to us did not reveal material information being lost, Allogene-specific security vulnerabilities or provide any useful information or insight into our systems or environment. However, we may not have all information related to such incidents and future incidents could have an adverse impact on our business.

We may be unable to detect and remediate vulnerabilities in our information technology systems because such threats and techniques change frequently, are often sophisticated in nature, and may not be detected until after a security incident has occurred. Despite our efforts to identify and remediate exploitable occurred, meaning that such vulnerabilities could be exploited. Unremediated high risk or critical vulnerabilities if any, in pose material risks to our information technology systems, our efforts may not be successful. business. Further, we may experience delays in developing and deploying remedial measures designed to address any such identified vulnerabilities. We may also face heightened physical and information technology risks due to our sharing office space with other tenants at certain of our sites. Any failure to prevent or mitigate security incidents or improper access to, use of, or disclosure of our clinical data or patients' personal data could result in significant liability under state, federal, and international law and may cause a material adverse impact to our reputation, affect our ability to conduct our clinical trials and potentially disrupt our business.

Applicable data protection laws, privacy policies, and data protection obligations and public company disclosure obligations may require us to notify relevant stakeholders, including affected individuals, regulators and investors, of certain security incidents. Such disclosures are costly, and the disclosures or the failure to comply with such requirements could lead to adverse consequences. If we (or a third party upon whom we rely) experience a security incident or are perceived to have experienced a security incident, we may also experience adverse consequences. These consequences may include: government enforcement actions (for example, investigations, fines, penalties, audits, and inspections); additional reporting requirements and/or oversight; restrictions on processing sensitive information (including personal data); litigation (including class claims); and mass arbitration; indemnification obligations; negative publicity; reputational harm; monetary fund diversions; interruptions in our operations (including availability of data); financial loss; and other similar harms. Whether a cybersecurity incident is reportable to our investors may not be straightforward, may take considerable time to determine, and may be subject to change as the investigation of the incident progresses, including changes that may significantly alter any initial disclosure that we provide. Moreover, experiencing a material cybersecurity incident and any mandatory disclosures could lead to negative publicity, loss of investor or partner confidence in the effectiveness of our cybersecurity measures, diversion of management's attention, governmental investigations, lawsuits, and the expenditure of significant capital and other resources.

Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that the limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations.

We cannot be sure that our insurance coverage will be adequate or sufficient to protect us from or adequately mitigate liabilities arising out of our privacy and security practices, or that such coverage will continue to be available on commercially reasonable terms or at all, or that such coverage will pay future claims.

In addition to experiencing a security incident, third parties may gather, collect, or infer sensitive information about us from public sources, data brokers, or other means that reveals competitively sensitive details about our organization and could be used to undermine our competitive advantage or market position.

Changes in funding for the FDA, the SEC and other government agencies could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept payment of user fees, statutory, regulatory and policy changes, and business disruptions, such as those caused by the COVID-19 pandemic. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical FDA, SEC and other government employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions,

which could have a material adverse effect on our business. Further, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.*

In addition to the business disruptions caused by the COVID-19 pandemic or cybersecurity attacks described above, our operations, and those of our CMOs, CROs, clinical trial sites and other contractors and consultants, could be subject to other disruptions, including those caused by earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, tsunamis, typhoons, fires, extreme weather conditions, medical epidemics, future resurgences of COVID-19, wars and other geopolitical conflicts (such as Russia Russia's military action against Ukraine) Ukraine and the Israel–Hamas conflict), bank failures, and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

Our ability to manufacture our product candidates could be disrupted if our operations or those of our suppliers are affected by a man-made or natural disaster or other business interruption. Our corporate headquarters and manufacturing facility are located in California near major earthquake faults and fire and flood zones. The ultimate impact on us, our significant suppliers and our general infrastructure of being located near major earthquake faults and fire and flood zones and being consolidated in certain geographical areas is unknown, but our operations and financial condition could suffer in the event of a major earthquake, fire, flood or other natural disaster.

Adverse developments affecting the financial services industry could adversely affect our current and projected business operations and our financial condition and results of operations.*

Adverse developments that affect financial institutions, such as events involving liquidity that are rumored or actual, have in the past and may in the future lead to bank failures and market-wide liquidity problems. For example, on March 10, 2023, Silicon Valley Bank ("SVB") was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation ("FDIC") as receiver. Similarly, on March 12, 2023, Signature Bank and Silvergate Capital Corp. were each swept into receivership. While the U.S. Department of Treasury, FDIC and Federal Reserve Board have implemented a program to provide up to $25 billion of loans to financial institutions secured by certain of such government securities held by financial institutions to mitigate the risk of potential losses on the sale of such instruments, widespread demands for customer withdrawals or other liquidity needs of financial institutions for immediate liquidity may exceed the capacity of such program, there is no guarantee that such programs will be sufficient. Additionally, it is uncertain whether the U.S. Department of Treasury, FDIC and Federal Reserve Board will provide access to uninsured funds in the future in the event of the closure of other banks or financial institutions, or that they would do so in a timely fashion. In addition, on May 1, 2023, the FDIC seized First Republic Bank and sold its assets to JPMorgan Chase & Co.

While we have not experienced any adverse impact to our liquidity or to our current and projected business operations, financial condition or results of operations as a result of the matters relating to SVB, Signature Bank, Silvergate Capital Corp and First Republic Bank, uncertainty remains over liquidity concerns in the broader financial services industry, and our business, our business partners or industry as a whole may be adversely impacted in ways that we cannot predict at this time.

Although we assess our banking relationships as we believe necessary or appropriate, our access to cash in amounts adequate to finance or capitalize our current and projected future business operations could be significantly impaired by factors that affect the financial institutions with which we have banking relationships. These factors could include, among others, events such as liquidity constraints or failures, the ability to perform obligations under various types of financial, credit or liquidity agreements or arrangements, disruptions or instability in the financial services industry or financial markets, or concerns or negative expectations about the prospects for companies in the financial services industry. These factors could also include factors involving financial markets or the financial services industry generally. The results of events or concerns that involve one or more of these factors could include a variety of material and adverse impacts on our current and projected business operations and our financial condition and results of operations. These could include, but may not be limited to, delayed access to deposits or other financial assets or the uninsured loss of deposits or other financial assets; or termination of cash management arrangements and/or delays in accessing or actual loss of funds subject to cash management arrangements.

In addition, widespread investor concerns regarding the U.S. or international financial systems could result in less favorable commercial financing terms, including higher interest rates or costs and tighter financial and operating covenants, or systemic limitations on access to credit and liquidity sources, thereby making it more difficult for us to acquire financing on acceptable terms or at all. Any decline in available funding or access to our cash and liquidity resources could, among other risks, adversely impact our ability

to meet our operating expenses, financial obligations or fulfill our other obligations, result in breaches of our financial and/or contractual obligations or result in violations of federal or state wage and hour laws. Any of these impacts, or any other impacts resulting from the factors described above or other related or similar factors not described above, could have material adverse impacts on our liquidity and our current and/or projected business operations and financial condition and results of operations.

We maintain our cash at financial institutions, often in balances that exceed federally insured limits.*

We maintain the majority of our cash and cash equivalents in accounts at banking institutions in the United States that we believe are of high quality. Cash held in these accounts often exceed the FDIC insurance limits. If such banking institutions were to fail, we could lose all or a portion of amounts held in excess of such insurance limitations. As noted above, the FDIC recently took control of SVB, Signature Bank, Silvergate Capital Corp and First Republic Bank. In the event of failure of any of the financial institutions where we maintain our cash and cash equivalents, there can be no assurance that we would be able to access uninsured funds in a timely manner or at all. Any inability to access or delay in accessing these funds could adversely affect our business and financial position.

Our relationships with customers, physicians, and third-party payors are subject, directly or indirectly, to federal, state, local and foreign healthcare fraud and abuse laws, false claims laws, health information privacy and security laws, and other healthcare laws and regulations. If we or our employees, independent contractors, consultants, commercial partners and vendors violate these laws, we could face substantial penalties.

These laws may impact, among other things, our clinical research program, as well as our proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare items and services is subject to extensive laws and regulations designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive and other business arrangements. We may also be subject to federal, state and foreign laws governing the privacy and security of identifiable patient information, price reporting, false claims and provider transparency. If our operations are found to be in violation of any of these laws that apply to us, we may be subject to significant civil, criminal and administrative penalties.

We are subject to stringent and changing privacy laws, regulations and standards as well as policies, contracts and other obligations related to data privacy and security. Our actual or perceived failure to comply with such obligations could lead to enforcement or litigation (that could result in (including class claims) and mass arbitration demands, fines or penalties), penalties, a disruption of clinical trials or commercialization of products, reputational harm, or other adverse business effects.*

In the ordinary course of business, we collect, receive, store, process use, generate, transfer, disclose, make accessible, protect, secure, dispose of, transmit and share (collectively, processing) personal data and other sensitive information, including, but not limited to, proprietary and confidential business information, trade secrets, intellectual property, and information we collect about patients in connection with clinical trials. information. Accordingly, we are, or may become, subject to numerous federal, state, local and international foreign data privacy and security laws, regulations, guidance, and industry standards as well as external and internal privacy and security policies, contracts and other obligations that apply to our processing of personal data and the processing of personal data on our behalf.

In the United States, federal, state, and local governments have enacted numerous data privacy and security laws, including data breach notification laws, personal data privacy laws, consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act) and other similar laws (e.g., wiretapping laws). For example, the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended by the Health Information Technology for Economic and Clinical Health

Act (HITECH), and their respective implementing regulations, imposes requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH, through its implementing regulations, makes certain of HIPAA's privacy and security standards directly applicable to business associates, defined as a person or organization, other than a member of a covered entity's workforce, that creates, receives, maintains or transmits protected health information for or on behalf of a covered entity for a function or activity regulated by HIPAA as well as their covered subcontractors.

In addition, the California Consumer Privacy Act (CCPA) applies to personal information of consumers, business representatives, and employees who are California residents, and creates individual privacy rights and places increased privacy and security obligations on entities handling personal data of consumers or households.The CCPA requires covered companies to provide disclosures to California consumers, residents, affords California residents certain rights related to their personal data, including the right to opt-out of certain sales of personal data, and allow allows for a new cause of action for certain data breaches. Although there are limited exemptions for clinical trial data under the CCPA, as our business progresses, the CCPA may become applicable and significantly impact our business activities and exemplifies the vulnerability of our business to evolving regulatory environment related to personal data and protected health information.Furthermore, the California Privacy Rights Act of 2020 (CPRA), effective January 1, 2023, expands the CCPA's requirements, including by applying to personal information of business representatives and employees and establishing a new regulatory agency to implement and enforce the law.In addition, other

states, such as Virginia and Colorado, have also passed comprehensive privacy laws, and similar laws are being considered in several other states, as well as at the federal and local levels. While these states, like the CCPA, also exempt some data processed in the context of clinical trials, these developments further complicate compliance efforts, and increase legal risk and compliance costs for us and the third parties upon whom we rely. Additionally, several states and localities have enacted statutes banning or restricting the collection of biometric information. Moreover, data privacy and security laws have been proposed at the federal, state, and local levels in recent years, which could further complicate compliance efforts.

Outside the United States, there are an increasing number of laws, regulations and industry standards concerning governing privacy, data protection, information security and cross-border personal data transfers. For example, the European Union's General Data Protection Regulation (EU GDPR), the United Kingdom's GDPR (UK GDPR) (collectively, GDPR), and China's Personal Information Protection Law (PIPL) impose strict requirements for processing personal data. Failure to comply with For example, under the requirements of the EU GDPR, companies may face temporary or definitive bans on data processing and the applicable national data protection laws of the EU member states may

result in other corrective actions; fines of up to €20,000,000 under the EU GDPR / 17.5 million pounds sterling under the UK GDPR, or up to 4% of the annual total worldwide annual turnover of the preceding financial year, revenue, in each case, whichever is higher, other administrative penalties, and greater; or private litigation related to processing of personal data brought by classes of data subjects or consumer protection organizations authorized at law to represent their interests. If we cannot implement a valid compliance mechanism for cross-border data transfers, we may face increased exposure to regulatory actions, substantial fines, and injunctions against processing or transferring personal data from Europe or other foreign jurisdictions. The inability to import personal data to the United States could significantly and negatively impact our business operations, including by limiting our ability to conduct clinical trial activities in Europe and elsewhere; limiting our ability to collaborate with parties that are subject to such cross-border data transfer or localization laws; or requiring us to increase our personal data processing capabilities and infrastructure in foreign jurisdictions at significant expenses. European regulators have also ordered certain companies to suspend or permanently cease certain transfers out of Europe for allegedly violating the GDPR's cross-border data transfer limitations. In Canada, the Personal Information Protection and Electronic Documents Act ("PIPEDA") and various related provincial laws, as well as Canada's Anti-Spam Legislation ("CASL"), may apply to our operations. Australia's Privacy Act may also apply to our operations.

In the ordinary course of business, we may transfer personal data from Europe and other jurisdictions to the United States or other countries. Europe and other jurisdictions have enacted laws requiring data to be localized or limiting the transfer of personal data to other countries. In particular, the European Economic Area (EEA) and the United Kingdom (UK) have significantly restricted the transfer of personal data to the United States and other countries whose privacy laws it generally believes are inadequate. Other jurisdictions may adopt similarly stringent interpretations of their data localization and cross-border data transfer laws. Although there are currently various mechanisms that may be used to transfer personal data from the EEA and UK to the United States in compliance with law, such as the EEA and UK's standard contractual clauses, the UK's International Data Transfer Agreement / Addendum, and the EU-U.S. Data Privacy Framework and the UK extension thereto (which allows for transfers for relevant U.S.-based organizations who self-certify compliance and participate in the Framework), these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the United States. If there is no lawful manner for us to transfer personal data from the EEA, UK, or other jurisdictions to the United States, or if the requirements for a legally-compliant transfer are too onerous, we may face significant adverse consequences, including the interruption or degradation of our operations, the need to relocate part of or all of our business or data processing activities to other jurisdictions (such as Europe) at significant expense, the inability to transfer data and work with partners, vendors and other third parties, increased exposure to regulatory actions, substantial fines, and injunctions against processing personal data necessary to operate our business. Additionally, companies that transfer personal data out of the EEA and UK to other jurisdictions, particularly to the United States, are subject to increased scrutiny from regulators, individual litigants, and activist groups. Some European regulators have also ordered certain companies to suspend or permanently cease certain transfers out of Europe for allegedly violating the GDPR's cross-border data transfer limitations.

In addition, privacy advocates and industry groups have proposed, and may propose, standards with which we are legally or contractually bound to comply. We are also bound by contractual obligations related to data privacy and security, and our efforts to comply with such obligations may not be successful. We publish privacy policies and other statements regarding data privacy and security. If any of our privacy policies or related materials or statements are found to be deficient, lacking in transparency, deceptive, unfair, or misrepresentative of our practices, we may be subject to investigation, enforcement actions by regulators or other adverse consequences.

Our obligations related to data privacy and security are quickly changing in an increasingly stringent fashion, creating some uncertainty as to the effective future legal framework. Additionally, these obligations may be subject to differing applications and interpretations, which may be inconsistent or conflict among jurisdictions. As a result, preparing for and complying with these obligations requires significant resources and may necessitate changes to our information technologies, systems and practices, as well as those of any third-party collaborators, service providers, contractors, consultants or other third parties that process personal data on our behalf.

Although we endeavor to comply with all applicable privacy and security obligations, we may at times fail to do so or may be perceived to have failed to do so. Moreover, despite our efforts, we may not be successful in achieving compliance if our employees, third-party collaborators, service providers, contractors or consultants fail to comply with such obligations, which could negatively impact our business operations and compliance posture. For example, any failure by a third-party service provider to comply with applicable law, regulations, or contractual obligations could result in adverse effects, including inability to or interruption in our ability to operate our business and proceedings against us by governmental entities or others. If we fail, or are perceived to have failed, to address or comply with obligations related to data privacy and security obligations, we could face significant consequences. These consequences may include, but are not limited to, government enforcement actions (e.g., investigations, fines, penalties, audits and inspections, and similar); litigation (including class-related claims); and mass arbitration demands; additional reporting requirements and/or oversight; temporary or permanent bans on all or some processing of personal data; orders to destroy or not use personal data; and imprisonment of company officials. In particular, plaintiffs have become increasingly more active in bringing privacy-related claims against companies, including class claims and mass arbitration demands. Some of these claims allow for the recovery of statutory damages on a per violation basis, and, if viable, carry the potential for monumental statutory damages, depending on the volume of data and the number of violations. Any of these events could have a material adverse effect on our reputation, business, or financial condition. condition, including but not limited to: interruptions or stoppages in our business operations (including clinical trials); inability to process personal data or to operate in certain jurisdictions; limited ability to develop or commercialize our products; expenditure of time and resources to defend any claim or inquiry; adverse publicity; or substantial changes to our business model or operations.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if our product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our product candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;

- product recalls, withdrawals or labeling, marketing or promotional restrictions;

- loss of revenue;
- exhaustion of any available insurance and our capital resources;
- the inability to commercialize any product candidate; and
- a decline in our share price.

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop, alone or with corporate collaborators. Our insurance policies may also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. While we have obtained and expect to obtain clinical trial insurance for our clinical trials, we may have to pay amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

Under current law, federal net operating losses incurred in tax years beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such federal net operating losses is limited to 80% of taxable income. It is uncertain if and to what extent various states will conform to federal tax laws. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, and corresponding provisions of state law, if a corporation undergoes an "ownership change" (generally defined as a greater than 50 percentage point change (by value) in the equity ownership of certain stockholders over a rolling three-year period), the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income or taxes may be limited. As a result of our IPO in October 2018 and private placements and other transactions that have occurred since our incorporation, we may have experienced an "ownership change". We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership. We anticipate incurring significant additional net losses for the foreseeable future, and our ability to utilize net operating loss carryforwards associated with any such losses to offset future taxable income may be limited to the extent we incur future ownership changes. In addition, at the state level, there may be periods during which the use of net operating loss carryforwards is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. As a result, we may be unable to use all or a material portion of our net operating loss carryforwards and other tax attributes, which could adversely affect our future cash flows.

Risks Related to Our Reliance on Third Parties

We rely and will continue to rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.

We depend and will continue to depend upon independent investigators and collaborators, such as universities, medical institutions, CROs and strategic partners to conduct our preclinical and clinical trials under agreements with us.

We negotiate budgets and contracts with CROs and study sites, which may result in delays to our development timelines and increased costs. We will rely heavily on these third parties over the course of our clinical trials, and we control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with applicable protocol, legal, regulatory and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. We and these third parties are required to comply with good clinical practices (GCPs), which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties fail to comply with applicable GCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, such regulatory authorities will determine that any of our clinical trials comply with the GCP regulations. In addition, our clinical trials must be conducted with biologic product produced under cGMPs and will require a large number of test patients. Our failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Any third parties conducting our clinical trials are and will not be our employees and, except for remedies available to us under our agreements with such third parties, we cannot control whether or not they devote sufficient time and resources to our ongoing preclinical, clinical and nonclinical programs. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical studies or other drug development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to complete development of, obtain regulatory approval of or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenue could be delayed.

If any of our relationships with trial sites, or any CRO that we may use in the future, terminates, we may not be able to enter into arrangements with alternative trial sites or CROs or do so on commercially reasonable terms. Switching or adding third parties to conduct our clinical trials involves substantial cost and requires extensive management time and focus. In addition, there is a natural transition period when a new third party commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines.

We rely on third parties to manufacture and store our clinical product supplies, and we may have to rely on third parties to produce and process our product candidates, if approved.

Our product candidates are manufactured in the United States by our CMOs, and we manage all other aspects of the supply, including planning, CMO oversight, disposition and distribution logistics. For example, in the past, Servier was responsible for UCART19 manufacturing, and experienced UCART19 supply issues that limited its ability to recruit new patients. There can be no assurance that we will not experience supply or manufacturing issues in the future.

We do not have long-term agreements in place with CMOs for the manufacture of our cell therapies or of ALLO-647. If we are unable to contract with CMOs on acceptable terms or at all, our clinical development program would be delayed and our business would be significantly harmed.

While we have built our own manufacturing facility for cell therapies, the transition of manufacturing to our own facility will require significant investment and that we meet certain regulatory conditions, which may delay or extend our clinical trial timelines. We decided to initiate the Phase 2 trial of ALLO-501A with material manufactured utilizing the Alloy process at our CMO, rather than material manufactured at our manufacturing facility that did not use the Alloy process. Re-engaging our CMO to manufacture Alloy-based material is costly and the CMO may fail in manufacturing, such as due to the CMO having limited recent experience with manufacturing Alloy-based material.

We have not yet caused our product candidates to be manufactured or processed on a commercial scale and may not be able to achieve manufacturing and processing and may be unable to create an inventory of mass-produced, off-the-shelf product to satisfy demands for any of our product candidates. Our clinical supply is also limited to small quantities and any latent defects discovered in our supply could significantly delay our development timelines.

In addition, our actual and potential future reliance on a limited number of third-party manufacturers exposes us to the following risks:

- We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA may have questions regarding any replacement contractor. This may require new testing and regulatory interactions. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products after receipt of FDA questions, if any.
- Our third-party manufacturers might be unable to timely formulate and manufacture our product or produce the quantity and quality required to meet our clinical and commercial needs, if any.
- Contract manufacturers may not be able to execute our manufacturing procedures appropriately.
- Manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration and corresponding state agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.

- We may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our products.
- Our future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.
- Our third-party manufacturers could breach or terminate their agreement with us.

Our contract manufacturers would also be subject to the same risks we face in developing our own manufacturing capabilities, as described above. Our current and potential future CMOs may also be required to shut down in response to health epidemics or pandemics, or they may prioritize manufacturing for therapies or vaccines for other diseases. In addition, our CMOs have certain responsibilities for storage of raw materials and in the past have lost or failed to adequately store our raw materials. We also rely on third parties to store our released product candidates, and any failure to adequately store our product candidates could result in significant delay to our development timelines. Any additional or future damage or loss of raw materials or product candidates could materially impact our ability to manufacture and supply our product candidates. Each of these risks could delay our clinical trials, the approval, if any of our product candidates by the FDA or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenue.

In addition, we rely on third parties to perform release tests on our product candidates prior to delivery to patients. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm.

We rely on T cells from healthy donors to manufacture our product candidates, and if we do not obtain an adequate supply of T cells from qualified donors, development of those product candidates may be adversely impacted.*

Unlike autologous CAR T companies, we are reliant on receiving healthy donor material to manufacture our product candidates. Healthy donor T cells vary in type and quality, and this variation makes producing standardized product candidates more difficult and makes the development and commercialization pathway of those product candidates more uncertain. We have developed a screening process designed to enhance the quality and consistency of T cells used in the manufacture of our CAR T cell product candidates, but the manufacturing runs we have completed and tested in the clinic are limited across our product candidates. As we gain experience, we may find that our screening process fails to identify suitable donor material and we may discover unacceptable variability with the material after production. We may also have to update our specifications for new risks that may emerge, such as to screen for new viruses or chromosomal abnormalities.

We have strict specifications for donor material, which include specifications required by regulatory authorities. If we are unable to identify and obtain donor material that satisfy specifications, agree with regulatory authorities on appropriate specifications, or address variability in donor T cells, there may be inconsistencies in the product candidates we produce or we may be unable to initiate or continue clinical trials on the timelines we expect, which could harm our reputation and adversely impact our business and prospects.

In addition, vendors have and are facing challenges in obtaining donor material. While we have donor material on hand, if our vendors are unable to secure donor material, we may no longer have sufficient donor material to manufacture our product candidates.

Cell-based therapies rely on the availability of specialty raw materials, which may not be available to us on acceptable terms or at all.

Our product candidates require many specialty raw materials, including viral vectors that deliver the CAR sequence and electroporation technology, some of which are manufactured by small companies with limited resources and experience to support a commercial product, and the suppliers may not be able to deliver raw materials to our specifications. We do not have contracts with many of the suppliers, and we may not be able to contract with them on acceptable terms, or at all. Many suppliers curtailed their operations during the COVID-19 pandemic, focused their operations on supporting COVID-19 therapies and vaccines, or have faced higher attrition, and our ability and the ability of our suppliers to source raw materials has been impacted. Accordingly, we may experience higher costs or delays in receiving, or fail to secure entirely, key raw materials to support clinical or commercial manufacturing. Certain raw materials also require third-party testing, and some of the testing service companies may not have capacity or be able to conduct the testing that we request.

In addition, many of our suppliers normally support blood-based hospital businesses and generally do not have the capacity to support commercial products manufactured under cGMP by biopharmaceutical firms. The suppliers may be ill-equipped to support our needs, including generating data required for a BLA and in non-routine circumstances like an FDA inspection or medical crisis, such as widespread contamination.

We also face competition for supplies from other cell therapy companies. Such competition may make it difficult for us to secure raw materials or the testing of such materials on commercially reasonable terms or in a timely manner.

Some raw materials are currently available from a single supplier, or a small number of suppliers. We cannot be sure that these suppliers will remain in business or that they will not be purchased by one of our competitors or another company that is not interested in continuing to produce these materials for our intended purpose. In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event we must switch to a new supplier. For certain raw materials, we are in the process of qualifying a new supplier or a new manufacturing site from an existing supplier, which requires meeting regulatory requirements for such qualification, and could result in additional costs, delays, diversion of resources or reduced manufacturing yields, any of which would negatively impact our operating results. Further, we may be unable to enter into agreements with a new supplier on commercially reasonable terms, which could have a material adverse impact on our business.

If we or our third-party suppliers use hazardous, non-hazardous, biological or other materials in a manner that causes injury or violates applicable law, we may be liable for damages. *

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical and biological materials. We and our suppliers are subject to federal, state and local laws and regulations in the United States governing the use, manufacture, storage, handling and disposal of medical and hazardous materials. Although we believe that we materials, and our suppliers' procedures for using, handling, storing and disposing of these materials comply with legally prescribed standards, we and our suppliers cannot completely eliminate the there is a risk of contamination or injury resulting from medical or hazardous materials. For instance, we have had and may continue to have environmental notice of violations at our manufacturing facility. As a result of any such contamination or injury, we may incur liability or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical or hazardous materials. In addition, we have commenced shipment of certain materials to our joint venture with Overland Pharmaceuticals (CY) Inc. in China and any violation by our joint venture in the use, manufacture, storage, handling and disposal under foreign law may subject us to additional liability.

Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations.

Risks Related to Government Regulation

The FDA regulatory approval process is lengthy and time-consuming, and we may experience significant delays in the clinical development and regulatory approval of our product candidates. *

The research, testing, manufacturing, labeling, approval, selling, import, export, marketing, and distribution of drug products, including biologics, are subject to extensive regulation by the FDA and other regulatory authorities in the United States. We are not permitted to market any biological drug product in the United States until we receive approval of a BLA from the FDA. We have not previously submitted a BLA to the FDA, or similar approval filings to comparable foreign authorities. A BLA must include extensive preclinical and clinical data and supporting information to establish the product candidate's safety and effectiveness for each desired indication. The BLA must also include significant information regarding

CMC matters for the product, and any delay or failure in generating such data to meet the evolving CMC regulatory requirements would delay any BLA filing.

We expect the novel nature of our product candidates to create further challenges in obtaining regulatory approval. For example, the FDA has limited experience with commercial development of allogeneic T cell therapies for cancer. We may also request clinical trial initiation or regulatory approval of future CAR-based product candidates by target, regardless of cancer type or origin, which the FDA may have difficulty accepting. The FDA may also require a panel of experts, referred to as an Advisory Committee, to deliberate on the adequacy of the safety and efficacy data to support licensure. The opinion of the Advisory Committee, although not binding, may have a significant impact on our ability to obtain licensure of the product candidates based on the completed clinical trials, as the FDA often adheres to the Advisory Committee's recommendations. Accordingly, the regulatory approval pathway for our product candidates may be uncertain, complex, expensive and lengthy, and approval may not be obtained.

We have previously experienced a delay in our clinical trials due to a clinical hold, and may experience future delays in completing planned clinical trials for a variety of reasons, including delays related to:

- obtaining regulatory authorization to begin a trial, if applicable;
- the availability of financial resources to commence and complete the planned trials;
- reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- obtaining approval at each clinical trial site by an independent IRB;
- obtaining regulatory and other approvals to modify the conduct of a clinical trial;
- recruiting suitable patients to participate in a trial;
- having patients complete a trial, including having patients enrolled in clinical trials dropping out of the trial prior to treatment, or return for post-treatment follow-up;
- clinical trial sites deviating from trial protocol or dropping out of a trial;
- addressing any patient safety concerns that arise during the course of a trial;
- adding new clinical trial sites; or
- manufacturing sufficient quantities of qualified materials under cGMPs, releasing product in accordance with specifications, and delivering product candidates for use in clinical trials.

We could also encounter future delays if physicians encounter unresolved ethical issues associated with enrolling patients in clinical trials of our product candidates in lieu of prescribing existing treatments that have established safety and efficacy profiles. Further, a clinical trial may be suspended or terminated by us, the IRBs for the institutions in which such trials are being conducted or by the FDA or other regulatory authorities due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions, lack of adequate funding to continue the clinical trial, or based on a recommendation by any Data Safety Monitoring Committee. The FDA's review of our data of our clinical trials may, depending on the data, also result in the delay, suspension or termination of one or more of our clinical trials, which would also delay or prevent the initiation of our other planned clinical trials. If we experience termination of, or delays in the completion of, any clinical trial of our product candidates, the commercial prospects for our product candidates will be harmed, and our ability to generate product revenue will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product development and approval process and jeopardize our ability to commence product sales and generate revenue.

Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may ultimately lead to the denial of regulatory approval of our product candidates.

The regulatory landscape that will govern our product candidates is uncertain; regulations relating to more established gene therapy and cell therapy products are still developing, and changes in regulatory requirements could result in delays or discontinuation of development of our product candidates or unexpected costs in obtaining regulatory approval.

*

Because we are developing novel CAR T cell immunotherapy product candidates that are unique biological entities, the regulatory requirements that we will be subject to are not entirely clear. Even with respect to more established products that fit into the categories of gene therapies or cell therapies, the regulatory landscape is still developing and guidance from regulatory authorities may continue to change in the future.

Moreover, there is substantial, and sometimes uncoordinated, overlap in those responsible for regulation of existing gene therapy products and cell therapy products. For example, in the United States, the FDA has established the Office of Tissues and Advanced Therapies (OTAT), formerly known as the Office of Cellular, Tissue and Gene Therapies (OCTGT), within its Center for Biologics Evaluation and Research (CBER) to consolidate the review of gene therapy and related products, and the Cellular, Tissue and Gene Therapies Advisory Committee to advise CBER on its review. Gene therapy clinical trials are also subject to review and oversight by an institutional biosafety committee (IBC), a local institutional committee that reviews and oversees basic and clinical research conducted at the institution participating in the clinical trial. Although the FDA decides whether individual gene therapy protocols may proceed, review process and determinations of other reviewing bodies can impede or delay the initiation of a clinical study, even if the FDA has reviewed the study and approved its initiation. Conversely, the FDA can place an IND application on clinical hold even if such other entities have provided a favorable review.

Furthermore, each clinical trial must be reviewed and approved by an independent IRB at or servicing each institution at which a clinical trial will be conducted. In addition, adverse developments in clinical trials of gene therapy products conducted by others may cause the FDA or other regulatory bodies to change the requirements for approval of any of our product candidates.

Complex regulatory environments exist in other jurisdictions in which we might consider seeking regulatory approvals for our product candidates, further complicating the regulatory landscape. For example, in the EU a special committee called the Committee for Advanced Therapies (CAT) was established within the EMA in accordance with Regulation (EC) No 1394/2007 on advanced-therapy medicinal products (ATMPs) to assess the quality, safety and efficacy of ATMPs, and to follow scientific developments in the field. ATMPs include gene therapy products as well as somatic cell therapy products and tissue engineered products. In this regard, on May 28, 2014, the EMA issued a recommendation that UCART19 be considered a gene therapy product under Regulation (EC) No 1394/2007 on ATMPs. We believe our other product candidates may receive a similar recommendation.

These various regulatory review committees and advisory groups and new or revised guidelines that they promulgate from time to time may lengthen the regulatory review process, require us to perform additional studies, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. Because the regulatory landscape for our CAR T cell immunotherapy product candidates is new, we may face even more cumbersome and complex regulations than those emerging for gene therapy products and cell therapy products. Furthermore, even if our product candidates obtain required regulatory approvals, such approvals may later be withdrawn as a result of changes in regulations or the interpretation of regulations by applicable regulatory agencies.

Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product to market could decrease our ability to generate sufficient product revenue to maintain our business.

The FDA may disagree with our regulatory plan and we may fail to obtain regulatory approval of our CAR T cell product candidates.*

The general approach for FDA approval of a new biologic or drug is for the sponsor to provide dispositive data from two well-controlled, Phase 3 clinical studies of the relevant biologic or drug in the relevant patient population. Phase 3 clinical studies typically involve hundreds of patients, have significant costs and take years to complete. We expect ongoing FDA feedback on our trials, some of which may lead to changes in the trials, which could cause future delays to our trials. In addition, even if we believe the results are sufficiently compelling, such as for both the ALPHA2 trial and EXPAND trial, the FDA could ultimately require longer-term follow-up results, additional data from our clinical trials or additional trials that could delay or prevent our first BLA submission. The FDA may require that we conduct a comparative trial against an approved therapy including potentially an approved autologous T cell therapy, which would significantly delay our development timelines and require substantially more resources. In addition, the FDA may only allow us to evaluate patients that have failed or who are ineligible for autologous therapy, which are extremely difficult patients to treat and patients with advanced and aggressive cancer, and our product candidates may fail to improve outcomes for such patients.

The If the FDA may grant grants accelerated approval for our product candidates, and, as a condition for accelerated approval, the FDA may require a sponsor of a drug or biologic receiving accelerated approval us to perform post-marketing studies to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoint, and the drug or biologic may be subject to withdrawal procedures by the FDA that are more accelerated than those available for regular approvals. We believe our The FDA may ultimately refuse to grant accelerated approval strategy is warranted given the limited alternatives for patients with R/R cancers, but the FDA may ultimately our product candidates and require a Phase 3 clinical trial prior to approval, particularly since our product candidates represent a novel treatment. In addition, the standard of care may change with the approval of new products in the same indications that we are studying. This may result in the FDA or other regulatory agencies requesting additional studies to show that our product candidate is superior to the new products.

Our clinical trial results may also not support approval. In addition, our product candidates could be delayed in receiving approval or fail to receive regulatory approval for many reasons, including the following:

- the inability to resolve any future clinical hold;
- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that our product candidates are safe and effective for any of their proposed indications;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval, including due to the heterogeneity of patient populations;
- we may be unable to demonstrate that our product candidates' clinical and other benefits outweigh their safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to the satisfaction of the FDA or comparable foreign regulatory authorities to support the submission of a BLA or other comparable submission in foreign jurisdictions or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities will review extensive CMC data, our manufacturing process and inspect the relevant commercial manufacturing facility and may not approve our manufacturing process or facility;

- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval; and
- we may be unable to agree on any required pediatric investigation plan with regulatory authorities prior to any BLA filing.

We may be unable to obtain regulatory approval for ALLO-647 in a timely manner or at all, which could delay any approval or commercialization of our allogeneic T cell product candidates.*

As we are concurrently developing ALLO-647 to be used as part of the lymphodepletion regimen for our allogeneic CAR T cell product candidates, mapping a co-development path for dual approval of ALLO-647 and any of our CAR T cell product candidates and coordinating concurrent review with different divisions of the FDA create additional regulatory uncertainty for us and may delay the development of our product candidates. We expect the Center for Drug Evaluation and Research division of the FDA to exercise authority over the regulatory approval of ALLO-647 while the CBER division will oversee the regulatory approval of our allogeneic CAR T cell product candidates.

In addition, the FDA is requiring us to demonstrate the overall contribution of ALLO-647 to the benefit to risk ratio of the lymphodepletion regimen for ALLO-501A. We plan to assess ALLO-647 in a separate potentially registrational trial, the EXPAND trial, that we recently initiated. which is ongoing. Some clinical trial sites have elected not to participate, and we cannot be certain when or whether we will be able to successfully enroll the EXPAND trial in a timely manner or that the outcome of this study will support FDA approval. For instance, enrolling two studies, ALPHA2 and EXPAND, that target the same indication may delay enrollment completion, and difference in data between the trials would introduce other regulatory review complications that would adversely impact both trials. Any delays to ALLO-647 approval could delay any approval or commercialization of our allogeneic CAR T cell product candidates.

Regenerative Medicine Advanced Therapy designation and Fast Track designation may not lead to a faster development or regulatory review or approval process and it does not increase the likelihood that our product candidates will receive marketing approval.

We have received Regenerative Medicine Advanced Therapy (RMAT) designation for ALLO-715 and ALLO-501A and fast track designation (FTD) for ALLO-605 and ALLO-316. There is no assurance that we will be able to obtain RMAT

designation or FTD for any of our additional product candidates. RMAT designation and FTD do not change the FDA's standards for product approval, and there is no assurance that such designation will result in expedited review or approval or that the approved indication will not be narrower than the indication covered by the designation. Additionally, RMAT designation and FTD can be revoked if the criteria for eligibility cease to be met as clinical data emerges.

We plan to seek orphan drug designation for some or all of our product candidates across various indications, but we may be unable to obtain such designations or to maintain the benefits associated with orphan drug designation, including market exclusivity, which may cause our revenue, if any, to be reduced.

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States when there is no reasonable expectation that the cost of developing and making available the drug or biologic in the United States will be recovered from sales in the United States for that drug or biologic. In order to obtain orphan drug designation, the request must be made before submitting a BLA. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval of that particular product for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a BLA, to market the same biologic (meaning, a product with the same principal molecular structural features) for the same indication for seven years, except in limited circumstances such as a showing of clinical superiority to the product with orphan drug exclusivity or if FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. As a result, even if one of our product candidates receives orphan exclusivity, the FDA can still approve other biologics that do not have the same principal molecular structural features for use in treating the same indication or disease or the same biologic for a different indication or disease during the exclusivity period. Furthermore, the FDA can waive orphan exclusivity if we are unable to manufacture sufficient supply of our product or if a subsequent applicant demonstrates clinical superiority over our product.

The FDA granted orphan drug designation to ALLO-605 and ALLO-715 for the treatment of multiple myeloma. We plan to seek orphan drug designation for additional product candidates in specific orphan indications in which there is a medically plausible basis for the use of these products, but may never receive such designations. Some of our product candidates target indications that are not orphan indications. In addition, even with orphan drug designation, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition, or if a subsequent applicant demonstrates clinical superiority over our products, if approved.

Negative public opinion and increased regulatory scrutiny of genetic research and therapies involving gene editing may damage public perception of our product candidates or adversely affect our ability to conduct our business or obtain regulatory approvals for our product candidates.

The gene-editing technologies that we use are novel. Public perception may be influenced by claims that gene editing is unsafe, and products incorporating gene editing may not gain the acceptance of the public or the medical community. Given the previous clinical hold involved a chromosomal abnormality, our manufacturing or gene editing may be further scrutinized or may be viewed as unsafe, even though our investigation found that the abnormality was not related to our manufacturing or gene editing. In particular, our success will depend upon physicians specializing in our targeted diseases prescribing our product candidates as treatments in lieu of, or in addition to, existing, more familiar, treatments for which greater clinical data may be available. Any increase in negative perceptions of gene editing may result in fewer physicians prescribing our treatments or may reduce the willingness of patients to utilize our treatments or participate in clinical trials for our product candidates.

In addition, given the novel nature of gene-editing and cell therapy technologies, governments may place import, export or other restrictions in order to retain control or limit the use of the technologies. For instance, any limits on exporting certain of our technology to China may adversely affect Allogene Overland Biopharm (CY) Limited (Allogene Overland), a joint venture established by us and Overland Pharmaceuticals (CY) Inc. Increased negative public opinion or more restrictive government regulations either in the United States or internationally, would have a negative effect on our business or financial

condition and may delay or impair the development and commercialization of our product candidates or demand for such product candidates.

We expect the product candidates we develop will be regulated as biological products, or biologics, and therefore they may be subject to competition sooner than anticipated.

The Biologics Price Competition and Innovation Act of 2009 (BPCIA) was enacted as part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the Affordable Care Act) to establish an abbreviated pathway for the approval of biosimilar and interchangeable biological products. The regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an approved biologic. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the reference product was approved under a BLA. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty and could have a material adverse effect on the future commercial prospects for our biological products.

We believe that any of the product candidates we develop that is approved in the United States as a biological product under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider the subject product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of the reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

Even if we obtain regulatory approval of our product candidates, the products may not gain market acceptance among physicians, patients, hospitals, cancer treatment centers and others in the medical community.

The use of engineered T cells as a potential cancer treatment is a recent development and may not become broadly accepted by physicians, patients, hospitals, cancer treatment centers and others in the medical community. We expect physicians in the large bone marrow transplant centers to be particularly important to the market acceptance of our products and we may not be able to educate them on the benefits of using our product candidates for many reasons. For example, certain of the product candidates that we will be developing target a cell surface marker that may be present on cancer cells as well as non-cancerous cells. It is possible that our product candidates may kill these non-cancerous cells, which may result in unacceptable side effects, including death. Additional factors will influence whether our product candidates are accepted in the market, including:

- the clinical indications for which our product candidates are approved;
- physicians, hospitals, cancer treatment centers and patients considering our product candidates as a safe and effective treatment;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA or other regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA;
- the timing of market introduction of our product candidates as well as competitive products;
- the cost of treatment in relation to alternative treatments;
- the availability of coverage and adequate reimbursement by third-party payors and government authorities;
- the willingness of patients to pay out-of-pocket in the absence of coverage and adequate reimbursement by third-party payors and government authorities;
- relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies; and
- the effectiveness of our sales and marketing efforts.

If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, cancer treatment centers or others in the medical community, we will not be able to generate significant revenue. Even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete.

Coverage and reimbursement may be limited or unavailable in certain market segments for our product candidates, which could make it difficult for us to sell our product candidates, if approved, profitably.

Successful sales of our product candidates, if approved, depend on the availability of coverage and adequate reimbursement from third-party payors including governmental healthcare programs, such as Medicare and Medicaid, managed care organizations and commercial payors, among others. Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In addition, because our product candidates represent new approaches to the treatment of cancer, we cannot accurately estimate the potential revenue from our product candidates.

Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Obtaining coverage and adequate reimbursement from third-party payors is critical to new product acceptance.

The marketability of any product candidates for which we receive regulatory approval for commercial sale may suffer if government and other third-party payors fail to provide coverage and adequate reimbursement. We expect downward pressure on pharmaceutical pricing to continue. Further, coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

The advancement of healthcare reform may negatively impact our ability to sell our product candidates, if approved, profitably.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products. Such reforms could have an adverse effect on anticipated revenue from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability.

Our business could be negatively impacted by environmental, social and corporate governance (ESG) matters or our reporting of such matters.

There is an increasing focus from certain investors, employees, partners, and other stakeholders concerning ESG matters. While we have internal efforts directed at ESG matters and preparations for any increased required future disclosures, we may be perceived to be not acting responsibly in connection with these matters, which could negatively impact us. Moreover, the SEC has recently proposed, and may continue to propose, certain mandated ESG reporting requirements, such as the SEC's proposed rules designed to enhance and standardize climate-related disclosures, which, if finally approved, would significantly increase our compliance and reporting costs and may also result in disclosures that certain investors or other stakeholders deem to negatively impact our reputation or that harm our stock price. In addition, we currently do not report our environmental emissions, and lack of reporting could result in certain investors declining to invest in our common stock.

Risks Related to Our Intellectual Property

We depend on intellectual property licensed from third parties and termination of any of these licenses could result in the loss of significant rights, which would harm our business.*

We are dependent on patents, know-how and proprietary technology, both our own and licensed from others. We depend substantially on our license agreements with Pfizer, Servier and Cellectis. These licenses may be terminated upon certain conditions. Any termination of these licenses could result in the loss of significant rights and could harm our ability to commercialize our product candidates. For example, we are dependent on our license with Cellectis for gene-editing technology that is necessary to produce our engineered T cells. In addition, we are reliant on Servier in-licensing from Cellectis some of the intellectual property rights they are licensing to us, including certain intellectual property rights relating to ALLO-501 and ALLO-501A. To the extent these licensors fail to meet their obligations under their license agreements, which we are not in control of, we may lose the benefits of our license agreements with these licensors. For instance, Cellectis has challenged and may in the future challenge certain performance by Servier, such as its development of products licensed under the Cellectis-Servier Agreement in ALL, and any failure by those parties to resolve such matters may have an adverse impact on us. In the future, we may also enter into additional license agreements that are material to the development of our product candidates.

Disputes may also arise between us and our licensors regarding intellectual property subject to a license agreement, including those related to:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes may infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates, and what activities satisfy those diligence obligations; and
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners.

For example, Servier has sent us a notice for material breach alleging that we overcharged them for costs eligible for cost-sharing under our license agreement with them. In addition, the parties are disputing the impact of Servier's discontinuation of ex-US development on the parties' rights and obligations under the license agreement. If we are unable to resolve our dispute with Servier, or if other disputes arise over intellectual property that we have licensed, or license in the future, it could prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, and we may be unable to successfully develop and commercialize the affected product candidates.

We are generally also subject to all of the same risks with respect to protection of intellectual property that we license, as we are for intellectual property that we own, which are described below. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize products could suffer.

If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our market.

We rely upon a combination of patents, trade secret protection and license agreements to protect the intellectual property related to our technologies. Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding our competitive position in our market.

Under the Servier Agreement, we have an exclusive license to develop and commercialize certain anti-CD19 allogeneic T cell product candidates, including ALLO-501A, and we hold the commercial rights to these product candidates in the United States. We also have an exclusive worldwide license from Cellectis to its TALEN gene-editing technology for the development of allogeneic T cell product candidates directed against 15 different cancer antigens. The Servier Agreement gives us access to TALEN gene-editing technology for all product candidates under the agreement. Certain intellectual property which is covered by these agreements may have been developed with funding from the U.S. government. If so, our rights in this intellectual property may be subject to certain research and other rights of the government.

Additional patent applications have been filed, and we anticipate additional patent applications will be filed, both in the United States and in other countries, as appropriate. However, we cannot predict:

- if and when patents will issue;
- the degree and range of protection any issued patents will afford us against competitors including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings which may be costly whether we win or lose.

Composition of matter patents for biological and pharmaceutical products such as CAR-based product candidates often provide a strong form of intellectual property protection for those types of products, as such patents provide protection without regard to any method of use. We cannot be certain that the claims in our pending patent applications covering compositions of matter of our product candidates will be considered patentable by the United States Patent and Trademark Office (USPTO) or by patent offices in foreign countries, or that the claims in any of our issued patents will be considered valid and enforceable by courts in the United States or foreign countries. Method of use patents protect the use of a product for the specified method.

This type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, physicians may prescribe these products "off-label." Although off-label prescriptions may infringe method of use patents, the practice is common and such infringement is difficult to prevent or prosecute.

The strength of patents in the biotechnology and pharmaceutical fields involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries. Even if the patents do successfully issue, third parties may challenge the patentability, validity, enforceability or scope thereof, for example through inter partes review (IPR), post-grant review or ex parte reexamination before the USPTO, or oppositions and other comparable proceedings in foreign jurisdictions, which may result in such patents being cancelled, narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing their products to avoid being covered by our claims. If the breadth or strength of protection provided by the patents and patent applications we hold with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced. United States patent applications containing or that at any time contained a claim not entitled to a priority date before March 16, 2013 are subject to the "first to file" system implemented by the America Invents Act (2011).

This first to file system will require us to be cognizant going forward of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates. Furthermore, for United States applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third-party or instituted by the USPTO, to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. For United States applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law in view of the passage of the America Invents Act, which brought into effect significant changes to the United States patent laws, including new procedures for challenging patent applications and issued patents.

Confidentiality agreements with employees, Allogene Overland and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information.*

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our product discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. Trade secrets, however, may be difficult to protect. Although we require all of our employees to assign their inventions to us, and require all of our employees and key consultants who have access to our proprietary know-how, information, or technology to enter into confidentiality agreements, we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. For example, we plan have and may continue to transfer technology to Allogene Overland or its affiliates in certain developing countries, and we cannot be certain that we or Allogene Overland or any of its affiliates will be able to protect or enforce any proprietary rights in these countries. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, operating results and financial condition.

Third-party claims of intellectual property infringement may prevent or delay our product discovery and development efforts and our ability to commercialize our product candidates.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing our product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to claims of infringement of the patent rights of others.

Third parties may assert that we infringe their patents or are otherwise employing their proprietary technology without authorization and may sue us. We are aware of several U.S. patents held by third parties that may be considered by those third parties to be relevant to cell-based therapies. Generally, conducting clinical trials and other development activities in the United States is not considered an act of infringement. If and when any of our product candidates is approved by the FDA, third parties may then seek to enforce their patents by filing a patent infringement lawsuit against us. Patents issued in the United States by law enjoy a presumption of validity that can be rebutted only with evidence that is "clear and convincing," a heightened standard of proof. We may not be able to prove in litigation that any patent enforced against us is invalid.

Additionally, there may be third-party patents of which we are currently unaware with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may be alleged to infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of our product candidates, constructs or molecules used in or formed during the manufacturing process, or any final product itself, the holders of any such patents may be able to block our ability to commercialize the product candidate unless we obtained a license under the applicable patents, or until such patents expire or they are finally determined to be held not infringed, unpatentable, invalid or unenforceable. Similarly, if any third-party patent were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy or patient selection methods, the holders of any such patent may be able to block our ability to develop and commercialize the product candidate unless we obtained a license or until such patent expires or is finally determined to be held not infringed, unpatentable, invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms or at all. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, or at all, our ability to commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business.

Parties who may make claims against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business and may impact our reputation. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign any of our alleged infringing products, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly.

We may not be successful in obtaining or maintaining necessary rights to product components and processes for our development pipeline through acquisitions and in-licenses.

Presently we have rights to the intellectual property, through licenses from third parties and under patent applications that we own or will own, that we believe will facilitate the development of our product candidates. Because our programs may involve additional product candidates that may require the use of proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to acquire, in-license or use these proprietary rights.

We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify. We may fail to acquire such rights or obtain any of these licenses at a reasonable cost or on reasonable terms, which would harm our business. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology. We may need to cease use of the compositions or methods covered by such third-party intellectual property rights.

The licensing and acquisition of third-party intellectual property rights is a competitive area, and companies, which may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that one or more of our patents is not valid or is unenforceable or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly and could put one or more of our pending patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and

attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure.

Interference proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors. An unfavorable outcome could result in a loss of our current patent rights and could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation or interference proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

The lives of our patents may not be sufficient to effectively protect our products and business.

Patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after its first effective filing date. Although various extensions may be available, the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be open to competition from biosimilar or generic medications. In addition, although upon issuance in the United States a patent's life can be increased based on certain delays caused by the USPTO, this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. If we do not have sufficient patent life to protect our products, our business and results of operations will be adversely affected.

We or our licensors may be subject to claims challenging the inventorship of our patents and other intellectual property.

We or our licensors may in the future be subject to claims that former employees, collaborators, or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we or our licensors are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Issued patents covering our product candidates could be found unpatentable, invalid or unenforceable if challenged in court or the USPTO.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate, as applicable, is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include IPR, ex parte re-examination and post grant review in the United States, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover and protect our product candidates. The outcome following legal assertions of unpatentability, invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we, our patent counsel and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of unpatentability, invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection could have a material adverse impact on our business.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological and legal complexity, and is therefore costly, time-consuming and inherently uncertain. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. For example, in the 2013 case, *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, the U.S. Supreme Court held that certain claims to DNA molecules are not patentable. While we do not believe that any of the patents owned or licensed by us will be found invalid based on this decision, we cannot predict how future decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patents.

We may not be able to protect our intellectual property rights throughout the world.

We may not be able to protect our intellectual property rights outside the United States. Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries where Allogene Overland or its affiliates may do business, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biopharmaceutical products, which could make it difficult for us or Allogene Overland or any of its affiliates to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful.

Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of these third parties or our employees' former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees.

Risks Related to Ownership of Our Common Stock

The price of our stock has been and may continue to be volatile, and you could lose all or part of your investment.

The trading price of our common stock following our IPO in October 2018 has been and is likely to continue to be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including limited trading volume. In addition to the factors discussed in this "Risk Factors" section, these factors include:

- the commencement, enrollment or results of our clinical trials of our product candidates or any future clinical trials we may conduct, or changes in the development status of our product candidates;
- our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;
- adverse results or delays in clinical trials;
- any delay in our regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- our failure to commercialize our product candidates;
- adverse regulatory decisions;
- changes in laws or regulations applicable to our products, including but not limited to clinical trial requirements for approvals;
- adverse developments concerning the manufacture or supply of our product candidates;
- our inability to obtain adequate product supply for any approved product or inability to do so at acceptable prices;
- our inability to establish collaborations if needed;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to immuno-oncology or related to the use of our product candidates or pre-conditioning regimen;
- introduction of new products or services offered by us or our competitors;
- changes in the status of one or more of our license or collaboration agreements, including any material disputes, amendments or terminations;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- our ability to effectively manage our growth;

- the size and growth of our initial cancer target markets;
- our ability to successfully treat additional types of cancers or at different stages;
- actual or anticipated variations in quarterly operating results;
- our cash position;

- our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- publication of research reports about us or our industry, or immunotherapy in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in the market valuations of similar companies;
- overall performance of the equity markets;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;
- changes in accounting practices;
- ineffectiveness of our disclosure controls or internal controls;
- disagreements with our auditor or termination of an auditor engagement;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;

- changes in the structure of healthcare payment systems;
- significant lawsuits, including patent or stockholder litigation;
- significant business disruptions caused by health epidemics or pandemics, or natural or man-made disasters;
- general political and economic conditions; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and the Nasdaq Global Select Market and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business, operating results or financial condition.

Our failure to establish and maintain effective internal control over financial reporting could result in material misstatements in our financial statements, our failure to meet our reporting obligations and cause investors to lose confidence in our reported financial information, which in turn could cause the trading price of our common stock to decline.*

Maintaining effective disclosure controls and procedures and internal controls over financial reporting are necessary for us to produce reliable financial statements. We are required, pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. Complying with Section 404 requires a rigorous compliance program as well as adequate time and resources. We may not be able to complete our internal control evaluation, testing and any required remediation in a timely fashion. Additionally, if we or our auditors identify one or more material weaknesses in our internal control over financial reporting, we will not be able to assert that our internal controls are effective. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis.

In 2021, we implemented a new enterprise resource planning (ERP) system, which required the investment of significant financial and human resources. We plan to continue to implement new ERP modules, which we also expect will require significant resources. Any failure to maintain or implement new or improved internal controls related to our ERP system or otherwise could result in material weaknesses, result in material misstatements in our consolidated financial statements and cause us to fail to meet our reporting obligations. This could cause us to lose public confidence and could cause the trading price of our common stock to decline.

As a result of our public float on June 30, 2023, commencing on December 31, 2023 we will become a non-accelerated filer. For so long as we remain a non-accelerated filer, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting pursuant to Section 404(b) of the

Sarbanes-Oxley Act. An independent assessment of the effectiveness of our internal control over financial reporting could detect problems that our management's assessment might not. Undetected material weaknesses in our internal control over financial reporting could lead to financial statement restatements and require us to incur the expense of remediation.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We currently anticipate that we will retain any future cash flow or earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock.

Anti-takeover provisions under our charter documents and Delaware law could delay or prevent a change of control which could limit the market price of our common stock and may prevent or frustrate attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change of control of our company or changes in our board of directors that our stockholders might consider favorable. Some of these provisions include:

- a board of directors divided into three classes serving staggered three-year terms, such that not all members of the board will be elected at one time;
- a prohibition on stockholder action through written consent, which requires that all stockholder actions be taken at a meeting of our stockholders;
- a requirement that special meetings of stockholders be called only by the chair of the board of directors, the chief executive officer, or by a majority of the total number of authorized directors;
- advance notice requirements for stockholder proposals and nominations for election to our board of directors;
- a requirement that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of not less than two-thirds of all outstanding shares of our voting stock then entitled to vote in the election of directors;
- a requirement of approval of not less than two-thirds of all outstanding shares of our voting stock to amend any bylaws by stockholder action or to amend specific provisions of our certificate of incorporation; and
- the authority of the board of directors to issue preferred stock on terms determined by the board of directors without stockholder approval and which preferred stock may include rights superior to the rights of the holders of common stock.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporate Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These anti-takeover provisions and other provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors and could also delay or impede a merger, tender offer or proxy contest involving our company. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing or cause us to take other corporate actions you desire. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

General Risk Factors

Unstable market, economic and geo-political conditions may have serious adverse consequences on our business, financial condition and stock price.*

The global credit and financial markets have experienced extreme volatility and disruptions in the past. These disruptions have resulted and may continue to result in severely diminished liquidity and credit availability, high inflation, declines in consumer confidence, disruptions in access to bank deposits or lending commitments due to bank failures and uncertainty about economic stability, declines in economic growth, and uncertainty about economic stability. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment, higher inflation, or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. Our portfolio of corporate and government bonds would also be adversely impacted. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our operations, growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive an economic downturn or rising inflation, which could directly affect our ability to attain our operating goals on schedule and on budget.

Other international and geo-political events could also have a serious adverse impact on our business. For instance, in February 2022, Russia initiated military action against Ukraine. Ukraine, and in October 2023, Hamas attacked Israel. In both cases, ongoing conflicts have ensued. In response to the Russian invasion, the United States and certain other countries imposed significant sanctions and trade actions against Russia and could impose further sanctions, trade restrictions, and other retaliatory actions. While we cannot predict the broader consequences, the conflict these conflicts and retaliatory and counter-retaliatory actions could materially adversely affect global trade, currency exchange rates, inflation, regional economies, and the global economy, which in turn may increase our costs, disrupt our supply chain, impair our ability to raise or access additional capital when needed on acceptable terms, if at all, or otherwise adversely affect our business, financial condition, and results of operations.

Sales of a substantial number of shares of our common stock by our existing stockholders in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur, including by any of our directors, officers or larger stockholders, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

If securities or industry analysts issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock could be influenced by the research and reports that industry or securities analysts publish about us or our business. If any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if the clinical trials and operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Appointment of Principal Financial Officer

In connection with the previously announced resignation of Eric Schmidt, Ph.D., from his position as Chief Financial Officer, principal financial officer and principal accounting officer of the Company effective at the close of business August 2, 2023 (CFO Resignation), on August 1, 2023, our board of directors appointed David M. Chang, M.D., Ph.D, our current President and Chief Executive Officer and member of the board of directors, as principal financial officer of the Company, to be effective on August 3, 2023..

Appointment of Principal Accounting Officer

In connection with the CFO Resignation, on August 1, 2023, our board of directors appointed Jack Chen, our current Vice President and Controller, as principal accounting officer of the Company, to be effective on August 3, 2023.

Mr. Chen, 53, has served as our Vice President and Controller since July 2018. Prior to joining us, Mr. Chen served as Vice President of Finance, Corporate Controller at Tintri, Inc., a provider of storage systems and data management software, from February 2014 to June 2018. Previously, Mr. Chen served as Director of Finance and was responsible for the financial planning and analysis for Grass Valley, LLC from September 2013 to February 2014 and Host Analytics, Inc. from January 2011 to July 2013. Before that, Mr. Chen held various managerial roles in finance and accounting at Sonics, Inc., Micromuse Inc., Ciphergen Biosystems, Inc. and Tumbleweed Communications. Mr. Chen began his career at KPMG US LLP. He received a B.A. in Economics from the University of Chicago, and a Masters in Accountancy Science from the University of Illinois at Urbana Champaign, and is a former certified public accountant.

Mr. Chen will also enter into an indemnity agreement with the Company in the form previously filed with the SEC on October 2, 2018 as Exhibit 10.1 to our Registration Statement on Form S-1, as amended.

There are no family relationships between Mr. Chen and any of our current or former directors or executive officers. Mr. Chen is not a party to any transaction that would require disclosure under Item 404(a) of Regulation S-K promulgated under the Securities Act of 1933, as amended.

None.

Item 6. Exhibits.

Exhibit number	Description of document
3.1	Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38693), filed with the SEC on October 15, 2018).
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38693), filed with the SEC on June 17, 2022).
3.3	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-38693), filed with the SEC on October 15, 2018).
4.1	Reference is made to Exhibits 3.1, 3.2 and 3.3.
4.2	Form of Common Stock Certificate of the Registrant (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-227333), filed with the SEC on October 2, 2018).
4.3	Investors Rights Agreement, dated April 6, 2018, as amended September 5, 2018, by and among the Registrant and certain of its stockholders (incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-227333), filed with the SEC on September 14, 2018).
5.1	Opinion of Cooley LLP.
10.1	Employment Letter of Agreement, dated August 11, 2023, by and between the Registrant and Earl Douglas.
10.2	Employment Letter of Agreement, dated October 12, 2023, by and between the Registrant and Geoffrey Parker.
10.3†‡	Asset Contribution Agreement, dated April 2, 2018, by and between the Registrant and Pfizer Inc.
10.4	Amendment No. 2 to Sales Agreement, dated November 2, 2023, by and between the Registrant and Cowen and Company, LLC.
23.1	Consent of Cooley LLP (included in Exhibit 5.1).
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	The cover page from the Company's Quarterly Report on Form 10-Q has been formatted in Inline XBRL.

† Certain portions of this exhibit (indicated by "[***]") have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K.

‡ Schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 2, 2023 November 2, 2023

By: */s/ David Chang*

David Chang, M.D., Ph.D.

Chief Executive Officer

(Principal Executive Officer)

Date: August 2, 2023 November 2, 2023

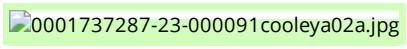
By: */s/ Eric Schmidt Geoffrey Parker*

Eric Schmidt, Ph.D. Geoffrey Parker

Chief Financial Officer

(Principal Financial and Accounting Officer)

78



Charles J. Bair
+1 858 550 6142
cbair@cooley.com

Exhibit 5.1

November 2, 2023

Allogene Therapeutics, Inc.
210 East Grand Avenue
South San Francisco, CA 94080

Ladies and Gentlemen:

We have acted as counsel to Allogene Therapeutics, Inc., a Delaware corporation (the "***Company***"), with respect to certain matters in connection with the offering by the Company of shares of the Company's common stock, $0.001 par value per share (the "***Common Stock***"), having aggregate sale proceeds of up to $250.0 million (the "***Shares***"), pursuant to a Registration Statement on Form S-3 (File No. 333-268117) (the "***Registration Statement***"), filed with the Securities and Exchange Commission (the "***Commission***") under the Securities Act of 1933, as amended (the "***Act***"), the prospectus included in the Registration Statement (the "***Base Prospectus***") and the prospectus supplement relating to the Shares dated November 2, 2023, to be filed with the Commission pursuant to Rule 424(b) under the Act (together with the Base Prospectus, the "***Prospectus***"). The Shares are to be sold by the Company in accordance with that certain Sales Agreement, dated November 5, 2019, as amended, by and between the Company and Cowen and Company, LLC (the "***Agreement***"), as described in the Prospectus.

In connection with this opinion, we have examined and relied upon the Registration Statement and the Prospectus, the Company's certificate of incorporation and bylaws, each as currently in effect, the Agreement and such other records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. In rendering this opinion, we have assumed the genuineness of all signatures; the authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

We have assumed (i) that each sale of Shares will be duly authorized by the Board of Directors of the Company, a duly authorized committee thereof or a person or body pursuant to an authorization granted in accordance with Section 152 of the General Corporation Law of the State of Delaware (the "***DGCL***"), (ii) that no more than 100,000,000 Shares will be sold pursuant to the Agreement and (iii) that the price at which the Shares are sold will equal or exceed the par value of the Common Stock. We express no opinion to the extent that future issuances of securities of the Company, anti-dilution adjustments to outstanding securities of the Company or other matters cause the number of shares of Common Stock issuable under the Agreement to exceed the number of shares of Common Stock available for issuance by the Company.

Our opinion herein is expressed solely with respect to the DGCL. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that the Shares, when issued against payment therefor in accordance with the Agreement, the Registration Statement and the Prospectus, will be validly issued, fully paid and nonassessable.

Our opinion is limited to the matters expressly set forth in this letter, and no opinion should be implied, or may be inferred, beyond the matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof, and we undertake no obligation or responsibility to update or supplement this letter to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus and to the filing of this opinion as an exhibit to the Company's Quarterly Report on Form 10-Q to be filed with the Commission for incorporation by reference into the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Securities Exchange Commission thereunder.

Sincerely,

COOLEY LLP

By: /s/ Charles J. Bair
Charles J. Bair

Exhibit 10.1

0001737287-23-000091allogenelogo.jpg

August 11, 2023

Earl Douglas

Re: Employment Letter of Agreement ("Agreement")

Dear Earl,

Allogene Therapeutics, Inc. ("Allogene" or the "Company") is pleased to offer you employment on the following terms and conditions.

1. Title; Reporting; Duties.

(a) When you commence employment with Allogene, you shall be employed in the position of SVP, General Counsel, shall report directly to David Chang, Chief Executive Officer and shall perform the duties and responsibilities that the Company assigns to you.

(b) You shall devote substantially all of your business time, attention and energies to the business and affairs of Allogene and shall not during the period of your employment be actively engaged in any other business activity, whether or not such business activity is pursued for gain, profit or other pecuniary advantage, that will materially interfere with the performance of your duties or your availability to perform such duties or that will adversely affect, or negatively reflect upon, Allogene.

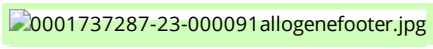
(c) You will be considered an onsite employee, generally working at headquarters, 210 E. Grand Ave, South San Francisco, CA.

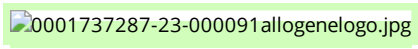
(d) Notwithstanding the foregoing, the Company may change your title, position, duties, supervisor and work location from time to time as it deems appropriate.

2. Compensation.

(a) Base Salary. You shall receive base salary paid at the rate of four hundred sixty-five thousand dollars ($465,000) per year, payable in accordance with Allogene's payroll practices. You may be eligible to earn a merit-based increase to your base salary at the sole discretion of the Company as part of the annual performance review process, which in your first year of employment will be prorated based on your start date.

(b) Bonus. Provided that you remain employed through the end of the calendar year, you may be eligible to earn an annual performance bonus at the sole discretion of the Company in an amount up to a target of forty-five percent (45%) of your base salary (the "Annual Bonus"). The Annual Bonus is designed to reward performance and encourage retention of employees, and will be based upon the Company's assessment of your





performance and the Company's attainment of targeted goals as set by the Company in its sole discretion. Following the close of each calendar year, the Company will determine whether you have earned an Annual Bonus, and the amount of any such bonus, based on the achievement of such goals. If you began employment during a calendar year and remained employed through the end of that year, you may be eligible to receive a prorated bonus based upon the time of your employment with the Company for that year. Notwithstanding the foregoing, no amount of Annual Bonus is guaranteed, and for employee retention purposes, you must be employed with Company through the end of the calendar year and on the Annual Bonus payment date to be eligible to earn an Annual Bonus. The Annual Bonus, if earned, will be paid no later than March 15 of the calendar year after the applicable bonus year.

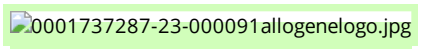
(c) Withholding. Allogene shall withhold all applicable federal, state and local taxes and social security and such other amounts as may be required by law from all amounts payable under this Section 2.

3. Options. Subject to the approval of the Board of Directors (the "Board"), or an authorized committee thereof, you shall be granted a stock option award having an aggregate grant date value of $2.7 million for the purchase of shares of Allogene's common stock (the "Common Stock") on the grant date. The grant date value will be calculated in accordance with the Black-Scholes option valuation methodology or such other methodology as the Board or the Compensation Committee of the Board may determine prior to the grant of such award (with the shares covered by the award rounded down to the nearest whole share). Such grant shall be evidenced by an option agreement (the "Option Agreement") to be entered into by and between you and the Company. The exercise price per option share will be equal to the fair market value per share of the Company's common stock as of the date that such Option is granted by the Board. The Option shall have a 10-year term and shall vest and become exercisable as follows: (i) 25% upon the first anniversary date of your employment start date (the "Initial Vesting Date"); and thereafter (ii) the remaining unvested options shares shall vest in 36 equal monthly installments following the Initial Vesting Date and measured from the first anniversary of the Initial Vesting Date. In the event of a conflict between this Agreement and the Option Agreement, the terms of the Option Agreement shall control.

4. RSUs. Subject to the approval of the Board, or an authorized committee thereof, you shall be granted a restricted stock unit award ("RSU") in the amount of a number of shares equal to $1.35 million divided by the closing price per share of the Company's Common Stock on The NASDAQ Global Select Market on the grant date (with the shares covered by the award rounded down to the nearest whole share). Such grant shall be evidenced by a Restricted Stock Unit Agreement (the "Award Agreement") to be entered into by and between you and the Company. The RSU shall vest in four (4) equal annual installments as of the annual anniversary of the 20th calendar day of the month of your Start Date. In the event of a conflict between this Agreement and the Award Agreement, the terms of the Award Agreement shall control.

5. Performance RSU. Subject to the approval of the Board, or an authorized committee thereof, you shall be granted an additional restricted stock unit ("Performance RSU") in the amount of a

---



number of shares equal to $450,000 divided by the closing price per share of the Company's Common Stock on The NASDAQ Global Select Market on the grant date (with the shares covered by the award rounded down to the nearest whole share). Such grant shall be evidenced by a Restricted Stock Unit Agreement (the "Performance Award Agreement") to be entered into by and between you and the Company. In the event of a conflict between this Agreement and the Performance Award Agreement, the terms of the Performance Award Agreement shall control. The Performance RSU shall vest in two (2) equal installments, with (a) the first installment to 50% of these will vest when ALLO achieves an $18.00 share price (30-day weighted average - no later than March 22, 2026) and 50% will vest upon the first ALLO product FDA Approval (no later than March 22, 2028).

6. Sign-On Advance. You will receive a sign-on advance in the amount of thirty thousand dollars ($30,000), subject to standard payroll deductions and withholdings, payable within thirty (30) days after your employment start date (the "Sign-On Advance"). The Sign-On Advance will be considered earned only if you successfully complete one (1) year of continuous employment with the Company. If within your first year of employment with the Company: (a) you resign your employment, or (b) the Company terminates your employment for Cause (as defined below), then you agree to pay back the entire amount of the Sign-on Advance within ten (10) days after your employment termination date. For purposes of this Agreement, "Cause" will mean any one or more of the following: (a) commission of any felony or crime involving dishonesty; (b) participation in any fraud against the Company; (c) material breach of your contractual, statutory or common law duties to the Company (including violation of any provision or obligation under this Agreement); (d) your failure to satisfactorily perform your job duties as assigned by the Company; (e) intentional damage to any property of the Company; or (f) misconduct or other violation of Company policy that causes or reasonably could cause harm.

7. Expenses. Allogene will reimburse you for all normal, usual and necessary expenses incurred in furtherance of the business and affairs of Allogene upon timely receipt by Allogene of appropriate vouchers or other proof of your expenditures and otherwise in accordance with any expense reimbursement and approval policy as may from time to time be adopted by Allogene.

8. Benefits. As a regular full-time employee, you shall be entitled to participate in the employee benefits made available to similarly situated employees, in accordance with the terms of such benefits plans and programs and company policies. Information regarding these employee benefits is available upon request and in the official plan documents, summary plan descriptions, and applicable summaries. The Company, in its sole discretion, has the right to amend or terminate any benefit plan, program or Company policy at any time and without prior notice.

9. Representations and Warranties. You hereby represent and warrant as follows:

   (a) By accepting the Company's offer of employment, you represent that you have no agreements, relationships, or commitments with any other person or entity that conflict with your obligations to the Company.

(b) You have the full right, power and legal capacity to enter and deliver this Agreement and to perform your duties and other obligations hereunder. This Agreement constitutes the legal, valid and binding obligation of the parties, enforceable against each in accordance with its terms. No approvals or consents of any persons or entitles are required for you to execute and deliver this Agreement or perform your duties and other obligations hereunder.

(c) You represent and warrant to the Company that you have not brought and shall not bring with you to the Company, or use in the performance of your duties, any materials or documents of any former employer that are not generally available to the public, unless you have obtained written authorization from the former employer for their possession and use and provided the Company with a copy thereof.

10. Conditions to Employment. This offer of employment is contingent upon, and your employment shall be subject to:

(a) completion of reference checks and background check, and may be contingent upon a drug screen, each to the reasonable satisfaction of Allogene; and

(b) satisfying the requirements of the Immigration Control and Reform Act, which may be accomplished by showing your proof of right to work in the U.S. within three days of commencing employment, and you agree to assist as needed at the Company's request to meet these conditions.

(c) execution of Allogene's form of Employee Confidential Information and Invention Assignment Agreement attached hereto as Exhibit A, which prohibits unauthorized use or disclosure of Allogene's proprietary information, among other obligations;

(d) Notwithstanding the foregoing, this offer may be withdrawn by Allogene at any time prior to its execution by the parties.

11. Employment-at-will and Termination. Your employment shall be at-will. Accordingly, you may terminate your employment with Allogene at any time and for any reason whatsoever, with or without advance notice, simply by notifying Allogene in writing. Similarly, Allogene may terminate your employment at any time and for any reason whatsoever, with or without cause or advance notice. This at-will relationship cannot be changed except in a writing signed by the Company's General Counsel and you. The employment terms contained in this Agreement supersede any other agreements and promises made to you by Allogene or any representative on its behalf, whether oral, written or implied.

12. No Reliance by You on Promise or Representation Not in this Agreement. In accepting employment with Allogene and signing this Agreement, you agree that you are not relying on any representation, promise or inducement that has been made by Allogene or any representative on its behalf that is not explicitly stated in this Agreement. Allogene is not bound

---

by and will not be liable for any representation, promise or inducement that is not explicitly stated in this Agreement.

13. Governing Law. The terms of this offer letter shall be governed by, and construed and interpreted in accordance with, the laws of the State of California without regard to such State's principles of conflict of laws, except as provided in Section 13.

14. Arbitration. To the maximum extent permitted by law, any dispute between the parties, including but not limited to those arising out of, or relating to, this Agreement, shall be exclusively decided by binding arbitration in accordance with the terms of the Arbitration Agreement

(should you opt to sign the Arbitration Agreement), which is attached as Exhibit B and incorporated into this Agreement. The Federal Arbitration Act shall govern the interpretation, enforcement and all proceedings pursuant to the Arbitration Agreement. To the extent that the Federal Arbitration Act is inapplicable, the terms of the Arbitration Agreement shall be construed in accordance with California law.

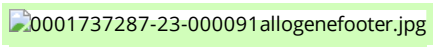
15. Miscellaneous.

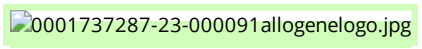
(a) This Agreement, and your rights and obligations hereunder, may not be assigned. Allogene may assign its rights, together with its obligations, hereunder in connection with any sale, transfer or other disposition of all or substantially all of its business or assets, provided the assignee entity which succeeds to Allogene expressly assumes Allogene's obligations hereunder and complies with the terms of this Agreement.

(b) This Agreement cannot be amended orally, or by any course of conduct or dealing, but only by a written agreement signed by the parties hereto. The Company's signatory must be an officer who is authorized by the Company to enter into such an amendment.

(c) The failure of either party to insist upon the strict performance of any of the terms, conditions and provisions of this Agreement shall not be construed as a waiver or relinquishment of future compliance therewith, and such terms, conditions and provisions shall remain in full force and effect. No waiver of any term or condition of this Agreement on the part of either party shall be effective for any purpose whatsoever unless such waiver is in writing and signed by such party. If any provision of this offer letter agreement is determined to be invalid or unenforceable, in whole or in part, this determination shall not affect any other provision of this offer letter agreement and the provision in question shall be modified so as to be rendered enforceable in a manner consistent with the intent of the parties insofar as possible under applicable law.

(d) This Agreement, including its Exhibits A and B, sets forth the entire agreement and understanding of the parties relating to the subject matter hereof, and supersedes all prior agreements, arrangements, and understandings, written or oral, relating to the subject matter of the Agreement. This letter may be delivered and executed via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, or other applicable law) or





other transmission method and shall be deemed to have been duly and validly delivered and executed and be valid and effective for all purposes.

16. Certification of Qualifications. By accepting employment, you certify that the information you provided to Allogene about your experience, education and other qualifications for employment has been accurate and complete.

If you wish to accept employment at Allogene under the terms described above, please sign and date this Agreement, and return it to me. If you accept this offer, we would like you to start employment on August 14, 2023, or as mutually agreed.

We look forward to your favorable reply and to a productive and enjoyable working relationship.

Sincerely,

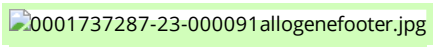
/s/ Susie Lundeen

Susie Lundeen
Chief People Officer
Allogene Therapeutics, Inc.

Understood and Accepted:

/s/ Earl Douglas
Earl Douglas

Aug 11, 2023
Date



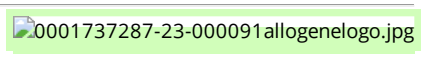
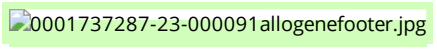


EXHIBIT A

Employee Confidential Information and Invention Assignment Agreement



EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Allogene Therapeutics, Inc., its direct and indirect subsidiaries, parents, affiliates, predecessors, successors and assigns (together **"Company"**), and the compensation and benefits provided to me now and during my employment with Company, I hereby enter into this Employee Confidential Information and Invention Assignment Agreement (the **"Agreement"**), which will be deemed effective as of the first day of my employment with the Company:

1. CONFIDENTIAL INFORMATION PROTECTIONS.

1.1 Recognition of Company's Rights; Nondisclosure. I understand and acknowledge that my employment by Company creates a relationship of confidence and trust with respect to Company's Confidential Information (as defined below) and that Company has a protectable interest therein. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information, except as such disclosure, use or publication may be required in connection with my work for Company, or unless an officer of Company expressly authorizes such disclosure. I will obtain Company's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that discloses and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in such Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Company and its assigns. I will take all reasonable precautions to prevent the inadvertent accidental disclosure of Confidential Information. Notwithstanding the foregoing, pursuant to 18 U.S.C. Section 1833(b), I shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that: (1) is made in confidence to a Federal State, or local government official, either directly o; indirectly, or to an attorney, and solely for the purpose of reporting or investigating a suspected violation of law; or (2) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

1.2 Confidential Information. The term **"Confidential Information"** shall mean any and all confidential knowledge, data or information of Company. By way of illustration but not limitation, **"Confidential Information"** includes (a) trade secrets, inventions, mask works, ideas, processes, formulas, software in source or object code versions, data, programs, other works of authorship, know- how, improvements, discoveries, developments, designs and techniques and any other proprietary technology and all Intellectual Property Rights therein (collectively, **"Inventions"**); (b) information regarding research, development, new products, marketing and selling, business plans, budgets and unpublished financial statements, licenses, prices and costs, margins, discounts, credit terms, pricing and billing policies, quoting procedures, methods of obtaining business, forecasts, future plans and potential strategies, financial projections and business strategies, operational plans, financing and capital-raising plans, activities and agreements, internal services and operational manuals, methods of conducting Company business, suppliers and supplier information, and purchasing; (c) information regarding customers and potential customers of Company, including customer lists, names, representatives, their needs or desires with respect to the types of products or services offered by Company, proposals, bids, contracts and their contents and parties, the type and quantity of products and services provided or sought to be provided to customers and potential customers of Company and other non-public information relating to customers and potential Customers; (d) information regarding any of Company's business partners and their services, including names; representatives, proposals, bids, contracts and their contents and parties, the type and quantity of products and services received by Company, and

other non-public information relating to business partners; (e) information regarding personnel, employee lists, compensation, and employee skills; and (f) any other non-public information which a competitor of Company could use to the competitive disadvantage of Company. Notwithstanding the foregoing, it is understood that, at all such times, I am free to use information which is generally known in the trade or industry through no breach of this Agreement or other act or omission by me. Further, notwithstanding the foregoing or anything to the contrary in this Agreement or any other agreement between the Company and me, nothing in this Agreement shall limit my right to discuss my employment or report possible violations of law or regulation with any federal government agency or similar state or local agency or to discuss the terms and conditions of my employment with others to the extent expressly permitted by Section 7 of the National Labor Relations Act or to the extent that such disclosure is protected under the applicable provisions of law or regulation.

1.3 Third Party Information. I understand, in addition, that Company has received and in the future will receive from third parties their confidential and/or proprietary knowledge, data or information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During my employment and thereafter, I will hold Third Party Information in confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, except in connection with my work for Company, Third Party Information unless expressly authorized by an officer of Company in writing.

1.4 No Improper Use of Information of Prior Employers and Others. During my employment by Company, I will not improperly use or disclose confidential information or trade secrets, if any, of any former employer or any other person to whom I have an obligation of confidentiality, and I will not bring onto the premises of Company any unpublished documents or any property belonging to any former employer or any other person to whom I have an obligation of confidentiality unless consented to in writing by that former employer or person.

2. ASSIGNMENTSOF INVENTIONS.

2.1 Definitions. As used in this Agreement, the term **"Intellectual Property Rights"** means all trade secrets, Copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country; the term **"Copyright"** means the exclusive legal right to reproduce, perform, display, distribute and make derivative works of a work of authorship (as a literary, musical, or artistic work) recognized by the laws of any jurisdiction or country; and the term **"Moral Rights"** means all paternity, integrity, disclosure, withdrawal, special and any other similar rights recognized by the laws of any jurisdiction or country.

2.2 Excluded Inventions and Other Inventions. Attached hereto as **Attachment 1** is a list describing all existing Inventions, if any, that may relate to Company's business or actual or demonstrably anticipated research or development and that were made by me or acquired by me prior to the commencement of my employment with, and which are not to be assigned to, Company (**"Excluded Inventions"**). If no such list is attached, I represent and agree that it is because I have no rights in any existing Inventions that may relate to Company's business or actual or demonstrably anticipated research or development. For purposes of this Agreement, **"Other Inventions"** means Inventions in which I have or may have an interest, as of the commencement of my employment or thereafter, other than Company Inventions (defined below) and Excluded Inventions. I acknowledge and agree that if I use any Excluded Inventions or any Other Inventions in the scope of my employment, or if I include any Excluded Inventions or Other Inventions in any product or service of Company, or if my rights in any Excluded Inventions or Other Inventions may block or interfere with, or may otherwise be required for, the exercise by Company of any rights assigned to Company under this Agreement, I will immediately so notify Company in writing. Unless Company and I agree otherwise in

writing as to particular Excluded Inventions or Other Inventions, I hereby grant to Company, in such circumstances (whether or not I give Company notice as required above), a non-exclusive, perpetual, transferable, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Excluded Inventions and Other Inventions. To the extent that any third parties have rights in any such Other Inventions, I hereby represent and warrant that such third party or parties have validly and irrevocably granted to me the right to grant the license stated above.

2.3 Assignment of Company Inventions. Inventions assigned to Company, or to a third party as directed by Company pursuant to Section 2.6, are referred to in this Agreement as **"Company Inventions."** Subject to Section 2.4 (Unassigned or Nonassignable Inventions) and except for Excluded Inventions set forth in **Attachment 1** and Other Inventions, I hereby assign to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company. To the extent required by applicable Copyright laws, I agree to assign in the future (when any copyrightable Inventions are first fixed in a tangible medium of expression) my Copyright rights in and to such Inventions. Any assignment of Company Inventions (and all Intellectual Property Rights with respect thereto) hereunder includes an assignment of all Moral Rights. To the extent such Moral Rights cannot be assigned to Company and to the extent the following is allowed by the laws in any country where Moral Rights exist, I hereby unconditionally and irrevocably waive the enforcement of such Moral Rights, and all claims and causes of action of any kind against Company or related to Company's customers, with respect to such rights. I further acknowledge and agree that neither my successors- in-interest nor legal heirs retain any Moral Rights in any Company Inventions (and any Intellectual Property Rights with respect thereto).

2.4 Unassigned or Nonassignable Inventions. I recognize that this Agreement will not be deemed to require assignment of any Invention that is covered under California Labor Code section 2870(a) (the "**Specific Inventions Law**"), as detailed on **Attachment 2**.

2.5 Obligation to Keep Company Informed. During the period of my employment and for one (1) year after termination of my employment, I will promptly and fully disclose to Company in writing all Inventions authored, conceived, or reduced to practice by me, either alone or jointly with others. In addition, I will promptly disclose to Company all patent applications filed by me or on my behalf within one (1) year after termination of employment. At the time of each such disclosure, I will advise Company in writing of any Inventions that I believe fully qualify for protection under the provisions of the Specific Inventions Law; and I will at that time provide to Company in writing all evidence necessary to substantiate that belief. Company will keep in confidence and will not use for any purpose or disclose to third parties without my consent any confidential information disclosed in writing to Company pursuant to this Agreement relating to Inventions that qualify fully for protection under the Specific Inventions Law. I will preserve the confidentiality of any Invention that does not fully qualify for protection under the Specific Inventions Law.

2.6 Government or Third Party. I agree that, as directed by Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.7 Ownership of Work Product.

(a) I acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of my employment and which are protectable by Copyright are "works made for hire," pursuant to United States Copyright Act (17 U.S.C., Section 101).

(b) I agree that Company will exclusively own all work product that is made by me (solely or jointly with others) within the scope of my employment, and I hereby irrevocably and unconditionally assign to Company all right, title, and interest worldwide in and to such work product. I understand and agree that I have no right to publish on, submit for publishing, or use for any publication any work product protected by this Section, except as necessary to perform services for Company.

2.8 Enforcement of Intellectual Property Rights and Assistance. I will assist Company in every proper way to obtain, and from time to time enforce, United States and foreign Intellectual Property Rights and Moral Rights relating to Company Inventions in any and all countries. To that end I will execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining and enforcing such Intellectual Property Rights and the assignment thereof. In addition, I will execute, verify and deliver assignments of such Intellectual Property Rights to Company or its designee, including the United States or any third party designated by Company. My obligation to assist Company with respect to Intellectual Property Rights relating to such Company Inventions in any and all countries will continue beyond the termination of my employment, but Company will compensate me at a reasonable rate after my termination for the time actually spent by me at Company's request on such assistance. In the event Company is unable for any reason, after reasonable effort, to secure my signature on any document needed in connection with the actions specified in this paragraph, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act for and in my behalf to execute, verify and file any such documents and to do all other lawfully permitted acts to further the purposes of the preceding paragraph with the same legal force and effect as if executed by me. I hereby waive and quitclaim to Company any and all claims, of any nature whatsoever, which I now or may hereafter have for infringement of any Intellectual Property Rights assigned under this Agreement to Company.

2.9 Incorporation of Software Code. I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company **except** in strict compliance with Company's policies regarding the use of such software.

3. Records. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by Company) of all Confidential Information developed by me and all Company Inventions made by me during the period of my employment at Company, which records will be available to and remain the sole property of Company at all times.

4. Dutyof Loyalty During Employment. I agree that during the period of my employment by Company I will not, without Company's express written consent, directly or indirectly engage in any employment or business activity which is directly or indirectly competitive with, or would otherwise conflict with, my employment by Company.

5. No Solicitation OF Employees, Consultants, or Contractors. I agree that during the period of my employment and for the one (1) year period after the date my employment ends for any reason, including but not limited to voluntary termination by me or involuntary termination by Company, I will not, as an officer, director, employee, consultant, owner, partner, or in any other capacity, either directly or through others, except on behalf of Company solicit, induce, encourage, or participate in soliciting, inducing or encouraging any employee, consultant, or independent contractor of Company to terminate his, her or its relationship with Company, even if I did not initiate the discussion or seek out the contact.

6. Reasonableness of Restrictions.

6.1 I agree that I have read this entire Agreement and understand it. I agree that this Agreement does not prevent me from earning a living or pursuing my career. I agree that the restrictions contained in this Agreement are reasonable, proper, and necessitated by Company's legitimate business interests. I represent and agree that I am entering into this Agreement freely and with knowledge of its contents with the intent to be bound by the Agreement and the restrictions contained in it.

6.2 In the event that a court or arbitrator finds this Agreement, or any of its restrictions, to be ambiguous, unenforceable, or invalid, Company and I agree that the court or arbitrator will read the Agreement as a whole and interpret the restriction(s) at issue to be enforceable and valid to the maximum extent allowed by law.

6.3 If the court or arbitrator declines to enforce this Agreement in the manner provided in subsection 6.2, Company and I agree that this Agreement will be automatically modified to provide Company with the maximum protection of its business interests allowed by law and I agree to be bound by this Agreement as modified.

7. No Disparagement. I agree that, during my employment with the Company and after the termination of my employment for any reason, I will not disparage the Company, its officers, directors, managers, employees, consultants, shareholders, or agents, in any manner likely to be harmful to it or their business, business reputation or personal reputation. Notwithstanding the foregoing, nothing in this Agreement shall prohibit me from making truthful statements or disclosures required by applicable law, regulation or legal process; or from discussing or disclosing information about unlawful acts in the workplace, such as harassment or discrimination or any other conduct that I have reason to believe is unlawful; or requesting or receiving confidential legal advice. Nothing in this Agreement shall limit my right to make truthful statements in the proper performance of my job duties for the Company, discuss my employment, or report possible violations of law or regulation with the SEC, EEOC, DOL, NLRB, OSHA or other federal government agency or similar state or local agency, or to discuss the terms and conditions of my employment with others to the extent expressly permitted by Section 7 of the NLRA, or to the extent that such disclosure is protected under the applicable provisions of law or regulation, including but not limited to "whistleblower" statutes or other similar provisions that protect such disclosure.

8. No Conflicting Agreement OR OBLIGATION. I represent that my employment by Company does not and will not breach any agreement with any former employer or third party, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement.

9. Return Of Company Property. Subject to the nondisclosure requirements of Section 1.1 above, upon termination of my employment or upon Company's request at any other time, I will deliver to Company any and all of Company's property and equipment and any and all drawings, notes, memoranda, specifications, devices, formulas and documents, together with all copies thereof, and any other material containing or disclosing any Company Inventions, Third Party Information or Confidential Information of Company. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide the Company access to any such personal systems as reasonably requested to search for, copy and/or delete such information, and upon my employment termination I agree to provide Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide Company access to my system as

reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company's personnel at any time with or without notice. Prior to leaving, I will cooperate with Company in attending an exit interview and completing and signing Company's Termination Certificate; however, my failure to sign and deliver the Termination Certificate shall in no way diminish my continuing obligations under this Agreement.

10. Legaland Equitable Remedies.

10.1 I agree that it may be impossible to assess the damages caused by my violation of this Agreement or any of its terms. I agree that any threatened or actual violation of this Agreement or any of its terms will constitute immediate and irreparable injury to Company, and Company will have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that Company may have for a breach or threatened breach of this Agreement.

10.2 In the event Company enforces this Agreement through a court or arbitration order, I agree that the restrictions of Sections 5 will remain in effect for a period of twelve (12) months from the effective date of the order enforcing the Agreement.

11. Notices. Any notices required or permitted under this Agreement will be given to Company at its headquarters location at the time notice is given, and to me at my address as listed on Company payroll, or at such other address as Company or I may designate by written notice to the other. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt.

12. Notification Of New Employer. If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

13. General Provisions.

13.1 Governing Law. This Agreement will be governed by and construed according to the laws of the State of California as such laws are applied to agreements entered into and to be performed entirely within California between California residents.

13.2 Severability. In case any one or more of the provisions, subsections, or sentences contained in this Agreement will, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect the other provisions of this Agreement, and this Agreement will be construed as if such invalid, illegal or unenforceable provision had never been contained in this Agreement. If moreover, any one or more of the provisions contained in this Agreement will for any reason be held to be excessively broad as to duration, geographical scope, activity or subject, it will be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it will then appear.

13.3 Successors and Assigns. This Agreement is for my benefit and the benefit of Company, its successors, assigns, parent corporations, direct and indirect subsidiaries, affiliates, and purchasers, and will be binding upon my heirs, executors, administrators and other legal representatives.

13.4 Survival. This Agreement shall survive the termination of my employment, regardless of the reason, and the assignment of this Agreement by Company to any successor in interest or other assignee.

13.5 Employment At-Will. I agree and understand that nothing in this Agreement will change my at-will employment status or confer any right with respect to continuation of employment by Company, nor will it interfere in any way with my

right or Company's right to terminate my employment at any time, with or without cause or advance notice.

13.6 Waiver. No waiver by Company of any breach of this Agreement will be a waiver of any preceding or succeeding breach. No waiver by Company of any right under this Agreement will be construed as a waiver of any other right. Company will not be required to give notice to enforce strict adherence to all terms of this Agreement.

13.7 Export. I agree not to export, reexport, or transfer, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, in violation of the United States export laws or regulations.

13.8 Advice of Counsel. I ACKNOWLEDGE THAT, IN EXECUTING THIS AGREEMENT, I HAVE HAD THE OPPORTUNITY TO SEEK THE ADVICE OF INDEPENDENT LEGAL COUNSEL, AND I HAVE READ AND UNDERSTOOD ALL OF THE TERMS AND PROVISIONS OF THIS AGREEMENT. THIS AGREEMENT WILL NOT BE CONSTRUED AGAINST ANY PARTY BY REASON OF THE DRAFTING OR PREPARATION OF THIS AGREEMENT.

13.9 Entire Agreement. The obligations pursuant to Sections 1 and 2 of this Agreement will apply to any time during which I was previously engaged, or am in the future engaged, by Company as a consultant (except Subsection 2.4 and 2.7(a)) or employee if no other agreement governs nondisclosure and assignment of inventions during such period. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter of this Agreement and supersedes and merges all prior discussions between us. No modification of or amendment to this Agreement, will be effective unless in writing and signed by the party to be charged. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of the first day of my employment with the Company.

EMPLOYEE:

IHAVE READ, UNDERSTAND, AND ACCEPT THIS AGREEMENT AND HAVE BEEN GIVEN THE OPPORTUNITY TO REVIEW IT WITH INDEPENDENT LEGAL COUNSEL. I HAVE ALSO COMPLETELY FILLED OUT ATTACHMENT 1.

/s/ Earl Douglas
(Signature)

By: Earl Douglas

Title: SVP, General Counsel

Date: Jun 23, 2023

Address:

COMPANY:

ACCEPTED AND AGREED:

/s/ Susie Lundeen
(Signature)

By: Susie Lundeen

Title: Chief People Officer

Date: April 4, 2023

Address: 210 E. Grand Avenue, South San Francisco, CA 94080

ATTACHMENT 1
PRIOR INVENTIONS

TO: **Allogene Therapeutics, Inc.**

FROM: Earl Douglas

DATE: Jun 23, 2023

SUBJECT: **Prior Inventions**

1. Except as listed in Section 2 below, the following is a complete list of all inventions or improvements relevant to the subject matter of my employment by Allogene Therapeutics, Inc. ("**Company**") that have been made or conceived or first reduced to practice by me alone or jointly with others prior to my engagement by Company:

☐ No inventions or improvements

☐ See below:

_____

_____

_____

☐ Additional sheets attached.

2. Due to a prior confidentiality agreement, I cannot complete the disclosure under Section 1 above with respect to inventions or improvements generally listed below, the intellectual property rights and duty of confidentiality with respect to which I owe to the following party(ies):

	Invention or Improvement	Party(ies)	Relationship
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

☐ Additional sheets attached.

ATTACHMENT 2
LIMITED EXCLUSION NOTIFICATION

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

(a) Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

(b) Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

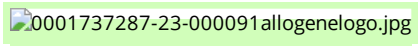
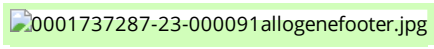


EXHIBIT B
Arbitration Agreement



Arbitration Agreement

I recognize that disputes may arise between Allogene Therapeutics, Inc. (the "Company") and me during or following my employment with the Company, and that those disputes may or may not be related to my employment. To address this possibility and facilitate efficiency and swift resolution, I am voluntarily agreeing to enter into this Arbitration Agreement ("Agreement") to determine how any such disputes will be resolved. The parties understand and agree that by entering into this Agreement, they anticipate gaining the benefits of a speedy, impartial, final and binding dispute-resolution procedure. Entering into this Agreement is entirely voluntary and is not a condition of employment, for continued employment, or for the receipt of any employment- related benefit.

The Company and I mutually consent to the resolution by arbitration of all claims or controversies ("claims"), past, present or future, whether or not arising out of my employment (or its termination), that the Company may have against me or that I (and no other party) may have against (1) the Company; (2) the Company's officers, directors, employees or agents in whatever capacity; (3) the Company's parent, subsidiary and affiliated entities; (4) the Company's benefit plans or the plans' sponsors, fiduciaries, administrators, affiliates and agents (except claims under an employee benefit or pension plan that specifies a different claims process; and/or (5) all successors and assigns of any of them. The Federal Arbitration Act (9 U.S.C., Sections 1-16) ("FAA") shall govern the interpretation, enforcement and all proceedings pursuant to this Agreement. To the extent that the Federal Arbitration Act is inapplicable, or held not to require arbitration of a particular claim or claims, the arbitration law of the state in which I work or last worked for the Company shall apply.

Arbitrable claims include, but are not limited to: claims for wages/other compensation due and any related claims; claims for breach of any contract or covenant (express or implied); tort claims; claims for retaliation; claims for harassment; claims for discrimination (including, but not limited to, race, sex, sexual orientation, religion, national origin, age, marital status, physical or mental disability or handicap, or medical condition); claims for benefits (except as noted above); and claims for violation of any federal, state, or other governmental law, statute, regulation, or ordinance. The following claims are not covered by this Agreement: claims for Workers' Compensation or Unemployment Insurance benefits; claims pending against the Company at the time I sign this Agreement in any forum; and claims that as a matter of law cannot be subject to arbitration.

Both the Company and I hereby waive the right to a trial by jury or judge, or by administrative proceeding, for any claim or dispute covered by this Agreement. Both the Company and I agree that neither of us shall initiate or prosecute any lawsuit in any way related to any claim covered by this Agreement to arbitrate, except that this Agreement does not prohibit the filing of or pursuit of relief through the following: (i) seeking temporary or preliminary injunction relief as is otherwise available by law, (ii) an administrative charge to any federal, state or local equal employment opportunity or fair employment practices agency, (iii) an administrative charge to the National Labor Relations Board, or (iv) any other charge filed with or communication to a federal, state or local government office, official or agency.

The arbitration will be held before a neutral arbitrator under the auspices of JAMS. The arbitration shall take place in the county (or comparable government unit) in which I am or was last employed by the Company, and, except as provided above, no dispute affecting my rights or responsibilities shall be adjudicated in any other venue or forum. The arbitration shall be held in accordance with its then-current Employment Arbitration Rules & Procedures (and no other JAMS rules), which are currently available at http://www.jamsadr.com/rules-employment-arbitration. I understand that the Company will provide me a written copy of those rules upon my request. The Arbitrator shall be either a retired judge, or an attorney who is experienced in employment law and licensed to practice law in the state in which the arbitration is convened (the "Arbitrator"), and shall be selected pursuant to the JAMS rules.

The Arbitrator shall apply the substantive law (and the law of remedies, if applicable) of the state in which the claim arose, or federal law, or both, as applicable to the claim(s) asserted. The Arbitrator is without jurisdiction to apply any different substantive law or law of remedies. The Federal Rules of Evidence shall apply. The Arbitrator shall have the power to award any types of legal or equitable relief that would be available under applicable law, shall have the authority to compel adequate discovery for the resolution of the dispute, and shall render an award and written opinion, which shall include the factual and legal basis for the award. The arbitration decision shall be final and binding upon the parties.

Questions regarding the enforceability, interpretation, scope, applicability or coverage of this Agreement (including whether an issue is subject to arbitration under this Agreement) shall be decided by the Arbitrator. Likewise, procedural questions which grow out of the dispute and bear on the final disposition are also matters for the Arbitrator. Pursuant to the FAA, issues of contract formation and enforcement relating to this Agreement shall be governed by and decided under the internal laws of the State of California, without regard to conflict of law rules.

The Company will be responsible for paying any filing fee and the fees and costs of the Arbitrator. Each party shall pay in the first instance its own litigation costs and attorneys' fees, if any. However, if any party prevails on a claim which affords the prevailing party attorneys' fees

and/or litigation costs, then the Arbitrator shall rule upon a motion for attorneys' fees and/or litigation costs under the same standards a court would apply under the law applicable to the claim(s) at issue.

To the maximum extent permitted by law, all claims, disputes, or causes of action under this Agreement, whether by me or the Company, and including individual claims under PAGA for Labor Code violations based solely on the party's alleged individual Labor Code violations, must be brought in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class, collective, or representative proceeding. The enforcement of the provisions of this arbitration procedure, including those that waive the ability to proceed on a class, collective or representative basis, shall be interpreted and applied by a court of competent jurisdiction, and not by an arbitrator.

It is the intent of the parties that any dispute covered by this arbitration procedure will be arbitrated on an individual basis only, and, unless prohibited by applicable law, the parties mutually waive their right to bring, maintain, participate in, or receive money from, any class, collective, or representative proceeding. Further, no dispute between the parties may be brought in arbitration under this arbitration procedure on behalf of others as a class or collective action or other representative proceeding, including a PAGA claim alleging violations affecting others. The arbitrator may not preside over any form of a class, collective, or representative proceeding.

With the written consent of all parties, the arbitrator may consolidate claims filed by multiple individuals each on their own behalf, in a single arbitration proceeding, so long as the arbitrator does not certify (conditionally or otherwise) a collective, class, or representative action that includes individuals who have not themselves already submitted their own individual claims.

In the event the foregoing waiver to proceed in arbitration on a class, collective, or representative basis, or any provision or portion thereof, is found to be unenforceable or contrary to law, then any claim brought on such a basis must proceed in a court of competent jurisdiction, and the court, not an arbitrator, shall be the exclusive forum for any class, collective, or representative claim.

Except where prohibited by law, the Company and I agree that any arbitration, including, without limitation, discovery, documents produced and/or entered into evidence, hearings, legal briefing and the final award, shall be confidential, although the final award may be disclosed as necessary to confirm the award and obtain entry of a final judgment by a court of competent jurisdiction. The Company and I further agree that we will execute written confidentiality agreements in order to ensure arbitration remains confidential.

This Agreement shall survive the termination of my employment and the expiration of any benefit plan. It can only be revoked by a writing signed by both the Company's General Counsel and me specifically stating the intent to revoke this Agreement.

This is the complete agreement of the parties on the subjects covered, and supersedes any prior or contemporaneous oral or written understandings on the subjects addressed in this Agreement; provided, however, that if this Agreement is held to be unenforceable for any reason, then any prior arbitration agreement between the Company and me shall survive. No party is relying on any representations, oral or written, on the subject of the effect, enforceability or meaning of this Agreement, except as specifically set forth in this Agreement. This Agreement only can be modified in a written agreement signed by the parties.

If any provision of this Agreement is adjudged to be void or otherwise unenforceable, in whole or in part, such adjudication shall not affect the validity of the remainder of the agreement. All other provisions shall remain in full force and effect. If necessary, to effectuate the intent of the parties to resolve the specified disputes through arbitration, a court of competent jurisdiction should reform this arbitration procedure. If any provision of this Agreement is adjudged to be void or otherwise unenforceable, in whole or in part, the void or unenforceable provision will be severed and the remainder of this Agreement will remain enforceable.

I understand that nothing in this Agreement affects the at-will nature of my employment with the Company, and that my employment may be terminated by either party, at any time, with or without cause or advance notice.

I acknowledge that I have carefully read this Agreement, that I understand its terms and that I have entered into the Agreement voluntarily and not in reliance of any promises or representations by the Company other than those contained in the Agreement. I have been given the opportunity to ask questions about the Agreement. I understand that by signing this Agreement, I am giving up my right to a jury trial. Further, I understand that I can choose not to enter into this Agreement without penalty, but have decided to voluntarily enter into the Agreement to facilitate resolution of any future disputes.

Date: Jun 23, 2023

/s/ Earl Douglas

Employee Signature

Earl Douglas

Printed Name of Employee

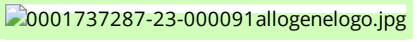
Date: Apr 4, 2023

ALLOGENE THERAPEUTICS, INC.

By: /s/ Susie Lundeen

Susie Lundeen, Chief People Officer

Exhibit 10.2



October 12, 2023

Geoffrey Parker

Re: Employment Letter of Agreement ("Agreement")

Dear Geoff,

Allogene Therapeutics, Inc. ("Allogene" or the "Company") is pleased to offer you employment on the following terms and conditions.

1. Title; Reporting; Duties.

(a) When you commence employment with Allogene, you will be employed in the position of Executive Vice President, Chief Financial Officer, will report directly to David Chang, Chief Executive Officer and shall perform the duties and responsibilities that the Company assigns to you.

(b) You will devote substantially all of your business time, attention and energies to the business and affairs of Allogene and will not during the period of your employment be actively engaged in any other business activity, whether or not such business activity is pursued for gain, profit or other pecuniary advantage, that will materially interfere with the performance of your duties or your availability to perform such duties or that will adversely affect, or negatively reflect upon, Allogene.

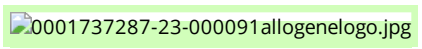
(c) You will be considered an onsite employee, generally working at headquarters, 210 E. Grand Ave, South San Francisco, CA.

(d) Notwithstanding the foregoing, the Company may change your title, position, duties, supervisor and work location from time to time as it deems appropriate.

2. Compensation.

(a) Base Salary. You shall receive base salary paid at the rate of four hundred ninety thousand dollars ($490,000) per year, payable in accordance with Allogene's payroll practices. You may be eligible to earn a merit-based increase to your base salary at the sole discretion of the Company as part of the annual performance review process, which in your first year of employment will be prorated based on your start date.

(b) Bonus. Provided that you remain employed through the end of the calendar year, you may be eligible to earn an annual performance bonus at the sole discretion of the Company in an amount up to a target of forty-five percent (45%) of your base salary (the "Annual Bonus"). The Annual Bonus is designed to reward performance and encourage retention of employees, and will be based upon the Company's assessment of your



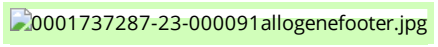
performance and the Company's attainment of targeted goals as set by the Company in its sole discretion. Following the close of each calendar year, the Company will determine whether you have earned an Annual Bonus, and the amount of any such bonus, based on the achievement of such goals. If you began employment during a calendar year and remained employed through the end of that year, you may be eligible to receive a prorated bonus based upon the time of your employment with the Company for that year. Notwithstanding the foregoing, no amount of Annual Bonus is guaranteed, and for employee retention purposes, you must be employed with Company through the end of the calendar year and on the Annual Bonus payment date to be eligible to earn an Annual Bonus. The Annual Bonus, if earned, will be paid no later than March 15 of the calendar year after the applicable bonus year.

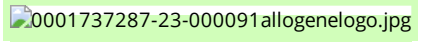
(c) Withholding. Allogene shall withhold all applicable federal, state and local taxes and social security and such other amounts as may be required by law from all amounts payable under this Section 2.

3. Options. Subject to the approval of the Board of Directors (the "Board"), or an authorized committee thereof, you shall be granted a stock option (the "Option") to purchase 950,000 shares of Allogene's common stock (the "Option Shares") pursuant to Allogene's 2018 Equity Incentive Plan (the "Plan"). Such grant shall be evidenced by an option agreement (the "Option Agreement") to be entered into by and between you and the Company. The exercise price per option share will be equal to the fair market value per share of the Company's common stock as of the date that such Option is granted by the Board. The Option shall have a 10-year term and shall vest and become exercisable as follows: (i) 25% upon the first anniversary date of your employment start date (the "Initial Vesting Date"); and thereafter (ii) the remaining unvested options shares shall vest in 36 equal monthly installments. In the event of a conflict between this Agreement and the Option Agreement, the terms of the Option Agreement shall control.

4. RSUs. Subject to the approval of the Board, or an authorized committee thereof, you shall be granted a restricted stock unit award ("RSU") in the amount of 400,000 shares of the Company's common stock pursuant to the Plan. Such grant shall be evidenced by a restricted stock unit agreement (the "RSU Award Agreement") to be entered into by and between you and the Company. The RSU shall vest in four (4) equal annual installments as of the annual anniversary of the 20th calendar day of the month of your Start Date. In the event of a conflict between this Agreement and the Award Agreement, the terms of the Award Agreement shall control.

5. Performance RSUs. Subject to the approval of the Board, or an authorized committee thereof, you shall be granted an additional restricted stock unit award ("Performance RSU") in the amount of 390,000 shares of the Company's common stock pursuant to the Plan. Such grant shall be evidenced by an agreement (the "Performance Award Agreement") to be entered into by and between you and the Company. In the event of a conflict between this Agreement and the Performance Award Agreement, the terms of the Performance Award Agreement shall control. The Performance RSU shall vest in two (2) equal installments, with (a) 50% vesting when the Company achieves a 30-day weighted average share price of $18.00 on or before March 22, 2026 and (b) 50% vesting upon the first marketing approval of a Company product by the United States Food and Drug Administration on or before March 22, 2028).





6. Expenses. Allogene will reimburse you for all normal, usual and necessary expenses incurred in furtherance of the business and affairs of Allogene upon timely receipt by Allogene of appropriate vouchers or other proof of your expenditures and otherwise in accordance with any expense reimbursement and approval policy as may from time to time be adopted by Allogene.

7. Benefits. As a regular full-time employee, you shall be entitled to participate in the employee benefits made available to similarly situated employees, in accordance with the terms of such benefits plans and programs and company policies. Information regarding these employee benefits is available upon request and in the official plan documents, summary plan descriptions, and applicable summaries. The Company, in its sole discretion, has the right to amend or terminate any benefit plan, program or Company policy at any time and without prior notice.

8. Representations and Warranties. You hereby represent and warrant as follows:

   (a) By accepting the Company's offer of employment, you represent that you have no agreements, relationships, or commitments with any other person or entity that conflict with your obligations to the Company.

   (b) You have the full right, power and legal capacity to enter and deliver this Agreement and to perform your duties and other obligations hereunder. This Agreement constitutes the legal, valid and binding obligation of the parties, enforceable against each in accordance with its terms. No approvals or consents of any persons or entitles are required for you to execute and deliver this Agreement or perform your duties and other obligations hereunder.

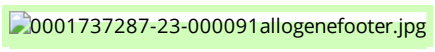
   (c) You represent and warrant to the Company that you have not brought and shall not bring with you to the Company, or use in the performance of your duties, any materials or documents of any former employer that are not generally available to the public, unless you have obtained written authorization from the former employer for their possession and use and provided the Company with a copy thereof.

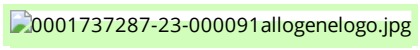
9. Conditions to Employment. This offer of employment is contingent upon, and your employment shall be subject to:

   (a) completion of reference checks and background check, and may be contingent upon a drug screen, each to the reasonable satisfaction of Allogene; and

   (b) satisfying the requirements of the Immigration Control and Reform Act, which may be accomplished by showing your proof of right to work in the U.S. within three days of commencing employment, and you agree to assist as needed at the Company's request to meet these conditions.

   (c) execution of Allogene's form of Employee Confidential Information and Invention Assignment Agreement attached hereto as Exhibit A, which prohibits unauthorized use or disclosure of Allogene's proprietary information, among other obligations;





   (d) Notwithstanding the foregoing, this offer may be withdrawn by Allogene at any time prior to its execution by the parties.

10. Employment-at-will and Termination. Your employment shall be at-will. Accordingly, you may terminate your employment with Allogene at any time and for any reason whatsoever, with or without advance notice, simply by notifying Allogene in writing. Similarly, Allogene may terminate your employment at any time and for any reason whatsoever, with or without cause or advance notice. This at-will relationship cannot be changed except in a writing signed by the Company's General Counsel and you. The employment terms contained in this Agreement supersede any other agreements and promises made to you by Allogene or any representative on its behalf, whether oral, written or implied.

11. No Reliance by You on Promise or Representation Not in this Agreement. In accepting employment with Allogene and signing this Agreement, you agree that you are not relying on any representation, promise or inducement that has been made by Allogene or any representative on its behalf that is not explicitly stated in this Agreement. Allogene is not bound by and will not be liable for any representation, promise or inducement that is not explicitly stated in this Agreement.

12. Governing Law. The terms of this offer letter shall be governed by, and construed and interpreted in accordance with, the laws of the State of California without regard to such State's principles of conflict of laws, except as provided in Section 13.

13. Arbitration. To the maximum extent permitted by law, any dispute between the parties, including but not limited to those arising out of, or relating to, this Agreement, shall be exclusively decided by binding arbitration in accordance with the terms of the Arbitration Agreement (should you opt to sign the Arbitration Agreement), which is attached as Exhibit B and incorporated into this Agreement. The Federal

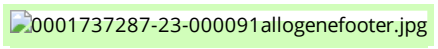
Arbitration Act shall govern the interpretation, enforcement and all proceedings pursuant to the Arbitration Agreement. To the extent that the Federal Arbitration Act is inapplicable, the terms of the Arbitration Agreement shall be construed in accordance with California law.

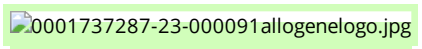
14. Miscellaneous.

(a) This Agreement, and your rights and obligations hereunder, may not be assigned. Allogene may assign its rights, together with its obligations, hereunder in connection with any sale, transfer or other disposition of all or substantially all of its business or assets, provided the assignee entity which succeeds to Allogene expressly assumes Allogene's obligations hereunder and complies with the terms of this Agreement.

(b) This Agreement cannot be amended orally, or by any course of conduct or dealing, but only by a written agreement signed by the parties hereto. The Company's signatory must be an officer who is authorized by the Company to enter into such an amendment.

(c) The failure of either party to insist upon the strict performance of any of the terms, conditions and provisions of this Agreement shall not be construed as a waiver or





relinquishment of future compliance therewith, and such terms, conditions and provisions shall remain in full force and effect. No waiver of any term or condition of this Agreement on the part of either party shall be effective for any purpose whatsoever unless such waiver is in writing and signed by such party. If any provision of this offer letter agreement is determined to be invalid or unenforceable, in whole or in part, this determination shall not affect any other provision of this offer letter agreement and the provision in question shall be modified so as to be rendered enforceable in a manner consistent with the intent of the parties insofar as possible under applicable law.

(d) This Agreement, including its Exhibits A and B, sets forth the entire agreement and understanding of the parties relating to the subject matter hereof, and supersedes all prior agreements, arrangements, and understandings, written or oral, relating to the subject matter of the Agreement. This letter may be delivered and executed via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, or other applicable law) or other transmission method and shall be deemed to have been duly and validly delivered and executed and be valid and effective for all purposes.

15. Certification of Qualifications. By accepting employment, you certify that the information you provided to Allogene about your experience, education and other qualifications for employment has been accurate and complete.

If you wish to accept employment at Allogene under the terms described above, please sign and date this Agreement, and return it to me. If you accept this offer, we would like you to start employment on October 16, 2023, or as mutually agreed.

We look forward to your favorable reply and to a productive and enjoyable working relationship.

Sincerely,

/s/ Susie Lundeen
Susie Lundeen
Chief People Officer
Allogene Therapeutics, Inc.

Understood and Accepted:

/s/ Geoffrey Parker	Oct 12, 2023
Geoffrey Parker	Date

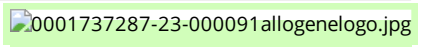
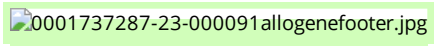

0001737287-23-000091allogenelogo.jpg

EXHIBIT A

Employee Confidential Information and Invention Assignment Agreement


0001737287-23-000091allogenefooter.jpg

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Allogene Therapeutics, Inc., its direct and indirect subsidiaries, parents, affiliates, predecessors, successors and assigns (together **"Company"**), and the compensation and benefits provided to me now and during my employment with Company, I hereby enter into this Employee Confidential Information and Invention Assignment Agreement (the **"Agreement"**), which will be deemed effective as of the first day of my employment with the Company:

1. CONFIDENTIAL INFORMATION PROTECTIONS.

1.1 Recognition of Company's Rights; Nondisclosure. I understand and acknowledge that my employment by Company creates a relationship of confidence and trust with respect to Company's Confidential Information (as defined below) and that Company has a protectable interest therein. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information, except as such disclosure, use or publication may be required in connection with my work for Company, or unless an officer of Company expressly authorizes such disclosure. I will obtain Company's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that discloses and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in such Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Company and its assigns. I will take all reasonable precautions to prevent the inadvertent accidental disclosure of Confidential Information. Notwithstanding the foregoing, pursuant to 18 U.S.C. Section 1833(b), I shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that: (1) is made in confidence to a Federal State, or local government official, either directly o; indirectly, or to an attorney, and solely for the purpose of reporting or investigating a suspected violation of law; or (2) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

1.2 Confidential Information. The term **"Confidential Information"** shall mean any and all confidential knowledge, data or information of Company. By way of illustration but not limitation, **"Confidential Information"** includes (a) trade secrets, inventions, mask works, ideas, processes, formulas, software in source or object code versions, data, programs, other works of authorship, know- how, improvements, discoveries, developments, designs and techniques and any other proprietary technology and all Intellectual Property Rights therein (collectively, **"Inventions"**); (b) information regarding research, development, new products, marketing and selling, business plans, budgets and unpublished financial statements, licenses, prices and costs, margins, discounts, credit terms, pricing and billing policies, quoting procedures, methods of obtaining business, forecasts, future plans and potential strategies, financial projections and business strategies, operational plans, financing and capital-raising plans, activities and agreements, internal services and operational manuals, methods of conducting Company business, suppliers and supplier information, and purchasing; (c) information regarding customers and potential customers of Company, including customer lists, names, representatives, their needs or desires with respect to the types of products or services offered by Company, proposals, bids, contracts and their contents and parties, the type and quantity of products and services provided or sought to be provided to customers and potential customers of Company and other non-public information relating to customers and potential Customers; (d) information regarding any of Company's business partners and their services, including names; representatives, proposals, bids, contracts and their contents and parties, the type and quantity of products and services received by Company, and

other non-public information relating to business partners; (e) information regarding personnel, employee lists, compensation, and employee skills; and (f) any other non-public information which a competitor of Company could use to the competitive disadvantage of Company. Notwithstanding the foregoing, it is understood that, at all such times, I am free to use information which is generally known in the trade or industry through no breach of this Agreement or other act or omission by me. Further, notwithstanding the foregoing or anything to the contrary in this Agreement or any other agreement between the Company and me, nothing in this Agreement shall limit my right to discuss my employment or report possible violations of law or regulation with any federal government agency or similar state or local agency or to discuss the terms and conditions of my employment with others to the extent expressly permitted by Section 7 of the National Labor Relations Act or to the extent that such disclosure is protected under the applicable provisions of law or regulation.

1.3 Third Party Information. I understand, in addition, that Company has received and in the future will receive from third parties their confidential and/or proprietary knowledge, data or information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During my employment and thereafter, I will hold Third Party Information in confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, except in connection with my work for Company, Third Party Information unless expressly authorized by an officer of Company in writing.

1.4 No Improper Use of Information of Prior Employers and Others. During my employment by Company, I will not improperly use or disclose confidential information or trade secrets, if any, of any former employer or any other person to whom I have an obligation of confidentiality, and I will not bring onto the premises of Company any unpublished documents or any property belonging to any former employer or any other person to whom I have an obligation of confidentiality unless consented to in writing by that former employer or person.

2. ASSIGNMENTSOF INVENTIONS.

2.1 Definitions. As used in this Agreement, the term **"Intellectual Property Rights"** means all trade secrets, Copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country; the term **"Copyright"** means the exclusive legal right to reproduce, perform, display, distribute and make derivative works of a work of authorship (as a literary, musical, or artistic work) recognized by the laws of any jurisdiction or country; and the term **"Moral Rights"** means all paternity, integrity, disclosure, withdrawal, special and any other similar rights recognized by the laws of any jurisdiction or country.

2.2 Excluded Inventions and Other Inventions. Attached hereto as **Attachment 1** is a list describing all existing Inventions, if any, that may relate to Company's business or actual or demonstrably anticipated research or development and that were made by me or acquired by me prior to the commencement of my employment with, and which are not to be assigned to, Company (**"Excluded Inventions"**). If no such list is attached, I represent and agree that it is because I have no rights in any existing Inventions that may relate to Company's business or actual or demonstrably anticipated research or development. For purposes of this Agreement, **"Other Inventions"** means Inventions in which I have or may have an interest, as of the commencement of my employment or thereafter, other than Company Inventions (defined below) and Excluded Inventions. I acknowledge and agree that if I use any Excluded Inventions or any Other Inventions in the scope of my employment, or if I include any Excluded Inventions or Other Inventions in any product or service of Company, or if my rights in any Excluded Inventions or Other Inventions may block or interfere with, or may otherwise be required for, the exercise by Company of any rights assigned to Company under this Agreement, I will immediately so notify Company in writing. Unless Company and I agree otherwise in

writing as to particular Excluded Inventions or Other Inventions, I hereby grant to Company, in such circumstances (whether or not I give Company notice as required above), a non-exclusive, perpetual, transferable, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Excluded Inventions and Other Inventions. To the extent that any third parties have rights in any such Other Inventions, I hereby represent and warrant that such third party or parties have validly and irrevocably granted to me the right to grant the license stated above.

2.3 Assignment of Company Inventions. Inventions assigned to Company, or to a third party as directed by Company pursuant to Section 2.6, are referred to in this Agreement as **"Company Inventions."** Subject to Section 2.4 (Unassigned or Nonassignable Inventions) and except for Excluded Inventions set forth in **Attachment 1** and Other Inventions, I hereby assign to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company. To the extent required by applicable Copyright laws, I agree to assign in the future (when any copyrightable Inventions are first fixed in a tangible medium of expression) my Copyright rights in and to such Inventions. Any assignment of Company Inventions (and all Intellectual Property Rights with respect thereto) hereunder includes an assignment of all Moral Rights. To the extent such Moral Rights cannot be assigned to Company and to the extent the following is allowed by the laws in any country where Moral Rights exist, I hereby unconditionally and irrevocably waive the enforcement of such Moral Rights, and all claims and causes of action of any kind against Company or related to Company's customers, with respect to such rights. I further acknowledge and agree that neither my successors- in-interest nor legal heirs retain any Moral Rights in any Company Inventions (and any Intellectual Property Rights with respect thereto).

2.4 Unassigned or Nonassignable Inventions. I recognize that this Agreement will not be deemed to require assignment of any Invention that is covered under California Labor Code section 2870(a) (the "**Specific Inventions Law**"), as detailed on **Attachment 2**.

2.5 Obligation to Keep Company Informed. During the period of my employment and for one (1) year after termination of my employment, I will promptly and fully disclose to Company in writing all Inventions authored, conceived, or reduced to practice by me, either alone or jointly with others. In addition, I will promptly disclose to Company all patent applications filed by me or on my behalf within one (1) year after termination of employment. At the time of each such disclosure, I will advise Company in writing of any Inventions that I believe fully qualify for protection under the provisions of the Specific Inventions Law; and I will at that time provide to Company in writing all evidence necessary to substantiate that belief. Company will keep in confidence and will not use for any purpose or disclose to third parties without my consent any confidential information disclosed in writing to Company pursuant to this Agreement relating to Inventions that qualify fully for protection under the Specific Inventions Law. I will preserve the confidentiality of any Invention that does not fully qualify for protection under the Specific Inventions Law.

2.6 Government or Third Party. I agree that, as directed by Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.7 Ownership of Work Product.

(a) I acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of my employment and which are protectable by Copyright are "works made for hire," pursuant to United States Copyright Act (17 U.S.C., Section 101).

(b) I agree that Company will exclusively own all work product that is made by me (solely or jointly with others) within the scope of my employment, and I hereby irrevocably and unconditionally assign to Company all right, title, and interest worldwide in and to such work product. I understand and agree that I have no right to publish on, submit for publishing, or use for any publication any work product protected by this Section, except as necessary to perform services for Company.

2.8 Enforcement of Intellectual Property Rights and Assistance. I will assist Company in every proper way to obtain, and from time to time enforce, United States and foreign Intellectual Property Rights and Moral Rights relating to Company Inventions in any and all countries. To that end I will execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining and enforcing such Intellectual Property Rights and the assignment thereof. In addition, I will execute, verify and deliver assignments of such Intellectual Property Rights to Company or its designee, including the United States or any third party designated by Company. My obligation to assist Company with respect to Intellectual Property Rights relating to such Company Inventions in any and all countries will continue beyond the termination of my employment, but Company will compensate me at a reasonable rate after my termination for the time actually spent by me at Company's request on such assistance. In the event Company is unable for any reason, after reasonable effort, to secure my signature on any document needed in connection with the actions specified in this paragraph, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act for and in my behalf to execute, verify and file any such documents and to do all other lawfully permitted acts to further the purposes of the preceding paragraph with the same legal force and effect as if executed by me. I hereby waive and quitclaim to Company any and all claims, of any nature whatsoever, which I now or may hereafter have for infringement of any Intellectual Property Rights assigned under this Agreement to Company.

2.9 Incorporation of Software Code. I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company **except** in strict compliance with Company's policies regarding the use of such software.

3. Records. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by Company) of all Confidential Information developed by me and all Company Inventions made by me during the period of my employment at Company, which records will be available to and remain the sole property of Company at all times.

4. Dutyof Loyalty During Employment. I agree that during the period of my employment by Company I will not, without Company's express written consent, directly or indirectly engage in any employment or business activity which is directly or indirectly competitive with, or would otherwise conflict with, my employment by Company.

5. No Solicitation OF Employees, Consultants, or Contractors. I agree that during the period of my employment and for the one (1) year period after the date my employment ends for any reason, including but not limited to voluntary termination by me or involuntary termination by Company, I will not, as an officer, director, employee, consultant, owner, partner, or in any other capacity, either directly or through others, except on behalf of Company solicit, induce, encourage, or participate in soliciting, inducing or encouraging any employee, consultant, or independent contractor of Company to terminate his, her or its relationship with Company, even if I did not initiate the discussion or seek out the contact.

6. Reasonableness of Restrictions.

6.1 I agree that I have read this entire Agreement and understand it. I agree that this Agreement does not prevent me from earning a living or pursuing my career. I agree that the restrictions contained in this Agreement are reasonable, proper, and necessitated by Company's legitimate business interests. I represent and agree that I am entering into this Agreement freely and with knowledge of its contents with the intent to be bound by the Agreement and the restrictions contained in it.

6.2 In the event that a court or arbitrator finds this Agreement, or any of its restrictions, to be ambiguous, unenforceable, or invalid, Company and I agree that the court or arbitrator will read the Agreement as a whole and interpret the restriction(s) at issue to be enforceable and valid to the maximum extent allowed by law.

6.3 If the court or arbitrator declines to enforce this Agreement in the manner provided in subsection 6.2, Company and I agree that this Agreement will be automatically modified to provide Company with the maximum protection of its business interests allowed by law and I agree to be bound by this Agreement as modified.

7. No Disparagement. I agree that, during my employment with the Company and after the termination of my employment for any reason, I will not disparage the Company, its officers, directors, managers, employees, consultants, shareholders, or agents, in any manner likely to be harmful to it or their business, business reputation or personal reputation. Notwithstanding the foregoing, nothing in this Agreement shall prohibit me from making truthful statements or disclosures required by applicable law, regulation or legal process; or from discussing or disclosing information about unlawful acts in the workplace, such as harassment or discrimination or any other conduct that I have reason to believe is unlawful; or requesting or receiving confidential legal advice. Nothing in this Agreement shall limit my right to make truthful statements in the proper performance of my job duties for the Company, discuss my employment, or report possible violations of law or regulation with the SEC, EEOC, DOL, NLRB, OSHA or other federal government agency or similar state or local agency, or to discuss the terms and conditions of my employment with others to the extent expressly permitted by Section 7 of the NLRA, or to the extent that such disclosure is protected under the applicable provisions of law or regulation, including but not limited to "whistleblower" statutes or other similar provisions that protect such disclosure.

8. No Conflicting Agreement OR OBLIGATION. I represent that my employment by Company does not and will not breach any agreement with any former employer or third party, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement.

9. Return Of Company Property. Subject to the nondisclosure requirements of Section 1.1 above, upon termination of my employment or upon Company's request at any other time, I will deliver to Company any and all of Company's property and equipment and any and all drawings, notes, memoranda, specifications, devices, formulas and documents, together with all copies thereof, and any other material containing or disclosing any Company Inventions, Third Party Information or Confidential Information of Company. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide the Company access to any such personal systems as reasonably requested to search for, copy and/or delete such information, and upon my employment termination I agree to provide Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide Company access to my system as

reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company's personnel at any time with or without notice. Prior to leaving, I will cooperate with Company in attending an exit interview and completing and signing Company's Termination Certificate; however, my failure to sign and deliver the Termination Certificate shall in no way diminish my continuing obligations under this Agreement.

10. Legaland Equitable Remedies.

10.1 I agree that it may be impossible to assess the damages caused by my violation of this Agreement or any of its terms. I agree that any threatened or actual violation of this Agreement or any of its terms will constitute immediate and irreparable injury to Company, and Company will have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that Company may have for a breach or threatened breach of this Agreement.

10.2 In the event Company enforces this Agreement through a court or arbitration order, I agree that the restrictions of Sections 5 will remain in effect for a period of twelve (12) months from the effective date of the order enforcing the Agreement.

11. Notices. Any notices required or permitted under this Agreement will be given to Company at its headquarters location at the time notice is given, and to me at my address as listed on Company payroll, or at such other address as Company or I may designate by written notice to the other. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt.

12. Notification Of New Employer. If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

13. General Provisions.

13.1 Governing Law. This Agreement will be governed by and construed according to the laws of the State of California as such laws are applied to agreements entered into and to be performed entirely within California between California residents.

13.2 Severability. In case any one or more of the provisions, subsections, or sentences contained in this Agreement will, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect the other provisions of this Agreement, and this Agreement will be construed as if such invalid, illegal or unenforceable provision had never been contained in this Agreement. If moreover, any one or more of the provisions contained in this Agreement will for any reason be held to be excessively broad as to duration, geographical scope, activity or subject, it will be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it will then appear.

13.3 Successors and Assigns. This Agreement is for my benefit and the benefit of Company, its successors, assigns, parent corporations, direct and indirect subsidiaries, affiliates, and purchasers, and will be binding upon my heirs, executors, administrators and other legal representatives.

13.4 Survival. This Agreement shall survive the termination of my employment, regardless of the reason, and the assignment of this Agreement by Company to any successor in interest or other assignee.

13.5 Employment At-Will. I agree and understand that nothing in this Agreement will change my at-will employment status or confer any right with respect to continuation of employment by Company, nor will it interfere in any way with my

right or Company's right to terminate my employment at any time, with or without cause or advance notice.

13.6 Waiver. No waiver by Company of any breach of this Agreement will be a waiver of any preceding or succeeding breach. No waiver by Company of any right under this Agreement will be construed as a waiver of any other right. Company will not be required to give notice to enforce strict adherence to all terms of this Agreement.

13.7 Export. I agree not to export, reexport, or transfer, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, in violation of the United States export laws or regulations.

13.8 Advice of Counsel. I ACKNOWLEDGE THAT, IN EXECUTING THIS AGREEMENT, I HAVE HAD THE OPPORTUNITY TO SEEK THE ADVICE OF INDEPENDENT LEGAL COUNSEL, AND I HAVE READ AND UNDERSTOOD ALL OF THE TERMS AND PROVISIONS OF THIS AGREEMENT. THIS AGREEMENT WILL NOT BE CONSTRUED AGAINST ANY PARTY BY REASON OF THE DRAFTING OR PREPARATION OF THIS AGREEMENT.

13.9 Entire Agreement. The obligations pursuant to Sections 1 and 2 of this Agreement will apply to any time during which I was previously engaged, or am in the future engaged, by Company as a consultant (except Subsection 2.4 and 2.7(a)) or employee if no other agreement governs nondisclosure and assignment of inventions during such period. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter of this Agreement and supersedes and merges all prior discussions between us. No modification of or amendment to this Agreement, will be effective unless in writing and signed by the party to be charged. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of the first day of my employment with the Company.

EMPLOYEE:

IHAVE READ, UNDERSTAND, AND ACCEPT THIS AGREEMENT AND HAVE BEEN GIVEN THE OPPORTUNITY TO REVIEW IT WITH INDEPENDENT LEGAL COUNSEL. I HAVE ALSO COMPLETELY FILLED OUT ATTACHMENT 1.

/s/ Geoffrey Parker
(Signature)

By: Geoffrey Parker
Title: EVP & CFO
Date: Sep 15, 2023
Address:

COMPANY:

ACCEPTED AND AGREED:

/s/ Susie Lundeen
(Signature)

By: Susie Lundeen
Title: Chief People Officer
Date: April 4, 2023
Address: 210 E. Grand Avenue, South San Francisco, CA 94080

ATTACHMENT 1
PRIOR INVENTIONS

TO: **Allogene Therapeutics, Inc.**
FROM: Geoffrey Parker
DATE: Sep 15, 2023
SUBJECT: **Prior Inventions**

1. Except as listed in Section 2 below, the following is a complete list of all inventions or improvements relevant to the subject matter of my employment by Allogene Therapeutics, Inc. ("**Company**") that have been made or conceived or first reduced to practice by me alone or jointly with others prior to my engagement by Company:

☐ No inventions or improvements

☐ See below:

_____

_____

_____

☐ Additional sheets attached.

2. Due to a prior confidentiality agreement, I cannot complete the disclosure under Section 1 above with respect to inventions or improvements generally listed below, the intellectual property rights and duty of confidentiality with respect to which I owe to the following party(ies):

	Invention or Improvement	Party(ies)	Relationship
1.			
2.			
3.			

☐ Additional sheets attached.

ATTACHMENT 2
LIMITED EXCLUSION NOTIFICATION

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

(a) Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

(b) Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

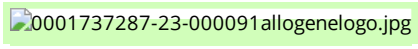
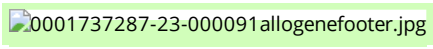


EXHIBIT B
Arbitration Agreement



Arbitration Agreement

I recognize that disputes may arise between Allogene Therapeutics, Inc. (the "Company") and me during or following my employment with the Company, and that those disputes may or may not be related to my employment. The parties understand and agree that by entering into this Arbitration Agreement (the "Agreement"), they anticipate gaining the benefits of a speedy, impartial, final and binding dispute- resolution procedure.

The Company and I mutually consent to the resolution by arbitration of all claims or controversies ("claims"), past, present or future, whether or not arising out of my employment (or its termination), that the Company may have against me or that I (and no other party) may have against (1) the Company; (2) the Company's officers, directors, employees or agents in whatever capacity; (3) the Company's parent, subsidiary and affiliated entities; (4) the Company's benefit plans or the plans' sponsors, fiduciaries, administrators, affiliates and agents (except claims under an employee benefit or pension plan that specifies a different claims process; and/or (5) all successors and assigns of any of them. The Federal Arbitration Act (9 U.S.C., Sections 1-16) ("FAA") shall govern the interpretation, enforcement and all proceedings pursuant to this Agreement. To the extent that the Federal Arbitration Act is inapplicable, or held not to require arbitration of a particular claim or claims, the arbitration law of the state in which I work or last worked for the Company shall apply.

Arbitrable claims include, but are not limited to: claims for wages/other compensation due and any related claims; claims for breach of any contract or covenant (express or implied); tort claims; claims for retaliation; claims for harassment; claims for discrimination (including, but not limited to, race, sex, sexual orientation, religion, national origin, age, marital status, physical or mental disability or handicap, or medical condition); claims for benefits (except as noted above); and claims for violation of any federal, state, or other governmental law, statute, regulation, or ordinance. The following claims are not covered by this Agreement: claims for Workers' Compensation or Unemployment Insurance benefits; claims pending against the Company at the time I sign this Agreement in any forum; and claims that as a matter of law cannot be subject to arbitration.

Both the Company and I hereby waive the right to a trial by jury or judge, or by administrative proceeding, for any claim or dispute covered by this Agreement. Both the Company and I agree that neither of us shall initiate or prosecute any lawsuit in any way related to any claim covered by this Agreement to arbitrate, except that this Agreement does not prohibit the filing of or pursuit of relief through the following: (i) seeking temporary or preliminary injunction relief as is otherwise available by law, (ii) an administrative charge to any federal, state or local equal employment opportunity or fair employment practices agency, (iii) an administrative charge to the National Labor Relations Board, or (iv) any other charge filed with or communication to a federal, state or local government office, official or agency.

The arbitration will be held before a neutral arbitrator under the auspices of JAMS. The arbitration shall take place in the county (or comparable government unit) in which I am or was last employed by the Company, and, except as provided above, no dispute affecting my rights or responsibilities shall be adjudicated in any other venue or forum. The arbitration shall be held in accordance with its then-current Employment Arbitration Rules & Procedures (and no other JAMS rules), which are currently available at http://www.jamsadr.com/rules-employment-arbitration. I understand that the Company will provide me a written copy of those rules upon my request. The Arbitrator shall be either a retired judge, or an attorney who is experienced in employment law and licensed to practice law in the state in which the arbitration is convened (the "Arbitrator"), and shall be selected pursuant to the JAMS rules.

The Arbitrator shall apply the substantive law (and the law of remedies, if applicable) of the state in which the claim arose, or federal law, or both, as applicable to the claim(s) asserted. The Arbitrator is without jurisdiction to apply any different substantive law or law of remedies. The Federal Rules of Evidence shall apply. The Arbitrator shall have the power to award any types of legal or equitable relief that would be available under applicable law, shall have the authority to compel adequate discovery for the resolution of the dispute, and shall render an award and written opinion, which shall include the factual and legal basis for the award. The arbitration decision shall be final and binding upon the parties.

Questions regarding the enforceability, interpretation, scope, applicability or coverage of this Agreement (including whether an issue is subject to arbitration under this Agreement) shall be decided by the Arbitrator. Likewise, procedural questions which grow out of the dispute and bear on the final disposition are also matters for the Arbitrator. Pursuant to the FAA, issues of contract formation and enforcement relating to this Agreement shall be governed by and decided under the internal laws of the State of California, without regard to conflict of law rules.

The Company will be responsible for paying any filing fee and the fees and costs of the Arbitrator. Each party shall pay in the first instance its own litigation costs and attorneys' fees, if any. However, if any party prevails on a claim which affords the prevailing party attorneys' fees and/or litigation costs, then the Arbitrator shall rule upon a motion for attorneys' fees and/or litigation costs under the same standards a court would apply under the law applicable to the claim(s) at issue.

To the maximum extent permitted by law, all claims, disputes, or causes of action under this Agreement, whether by me or the Company, and including individual claims under PAGA for Labor Code violations based solely on the party's alleged individual Labor Code violations, must be brought in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class, collective, or representative proceeding. The enforcement of the provisions of this arbitration procedure, including those that waive the ability to proceed on a class, collective or representative basis, shall be interpreted and applied by a court of competent jurisdiction, and not by an arbitrator.

It is the intent of the parties that any dispute covered by this arbitration procedure will be arbitrated on an individual basis only, and, unless prohibited by applicable law, the parties mutually waive their right to bring, maintain, participate in, or receive money from, any class, collective, or representative

proceeding. Further, no dispute between the parties may be brought in arbitration under this arbitration procedure on behalf of others as a class or collective action or other representative proceeding, including a PAGA claim alleging violations affecting others. The arbitrator may not preside over any form of a class, collective, or representative proceeding.

With the written consent of all parties, the arbitrator may consolidate claims filed by multiple individuals each on their own behalf, in a single arbitration proceeding, so long as the arbitrator does not certify (conditionally or otherwise) a collective, class, or representative action that includes individuals who have not themselves already submitted their own individual claims.

In the event the foregoing waiver to proceed in arbitration on a class, collective, or representative basis, or any provision or portion thereof, is found to be unenforceable or contrary to law, then any claim brought on such a basis must proceed in a court of competent jurisdiction, and the court, not an arbitrator, shall be the exclusive forum for any class, collective, or representative claim.

Except where prohibited by law, the Company and I agree that any arbitration, including, without limitation, discovery, documents produced and/or entered into evidence, hearings, legal briefing and the final award, shall be confidential, although the final award may be disclosed as necessary to confirm the award and obtain entry of a final judgment by a court of competent jurisdiction. The Company and I

further agree that we will execute written confidentiality agreements in order to ensure arbitration remains confidential.

This Agreement shall survive the termination of my employment and the expiration of any benefit plan. It can only be revoked by a writing signed by both the Company's General Counsel and me specifically stating the intent to revoke this Agreement.

This is the complete agreement of the parties on the subjects covered, and supersedes any prior or contemporaneous oral or written understandings on the subjects addressed in this Agreement; provided, however, that if this Agreement is held to be unenforceable for any reason, then any prior arbitration agreement between the Company and me shall survive. No party is relying on any representations, oral or written, on the subject of the effect, enforceability or meaning of this Agreement, except as specifically set forth in this Agreement. This Agreement only can be modified in a written agreement signed by the parties.

If any provision of this Agreement is adjudged to be void or otherwise unenforceable, in whole or in part, such adjudication shall not affect the validity of the remainder of the agreement. All other provisions shall remain in full force and effect. If necessary, to effectuate the intent of the parties to resolve the specified disputes through arbitration, a court of competent jurisdiction should reform this arbitration procedure. If any provision of this Agreement is adjudged to be void or otherwise unenforceable, in whole or in part, the void or unenforceable provision will be severed and the remainder of this Agreement will remain enforceable.

I understand that nothing in this Agreement affects the at-will nature of my employment with the Company, and that my employment may be terminated by either party, at any time, with or without cause or advance notice.

I acknowledge that I have carefully read this Agreement and I have been given the opportunity to discuss the agreement with my own legal counsel. I further understand that by signing this Agreement, I am giving up my right to a jury trial and have agreed to facilitate resolution of any future disputes between the parties as described above. **My signature below attests to the fact that I have had sufficient time to carefully read this Agreement, and that I understand and agree to be bound by its terms.**

Date: Sep 15, 2023

/s/ Geoffrey Parker

Employee Signature

Geoffrey Parker

Printed Name of Employee

Date: August 22, 2023

ALLOGENE THERAPEUTICS, INC.

By: /s/ Susie Lundeen

Susie Lundeen, Chief People Officer

Exhibit 10.3

CERTAIN IDENTIFIED INFORMATION, MARKED BY [...*...], HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH NOT MATERIAL AND IS OF THE TYPE OF INFORMATION THAT ALLOGENE THERAPEUTICS, INC. CUSTOMARILY AND ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL**

EXECUTION VERSION

ASSET CONTRIBUTION AGREEMENT

BY AND BETWEEN

PFIZER INC.

AND

ALLOGENE THERAPEUTICS, INC.

Dated as of April 2, 2018

TABLE OF CONTENTS

ASSET CONTRIBUTION AGREEMENT

This Asset Contribution Agreement (this "Agreement") is entered into as of April 2, 2018 (the "Effective Date"), by and between Pfizer Inc., a Delaware corporation("Pfizer"), and Allogene Therapeutics, Inc., a Delaware corporation ("NewCo").

WHEREAS, Pfizer and the Pfizer Subsidiaries (the "Pfizer Parties") are engaged in, among other things, the Purchased Programs;

WHEREAS, NewCo desires to purchase from Pfizer, and Pfizer desires to sell to NewCo, certain assets related to the Purchased Programs, and NewCo is willing to assume certain Liabilities related to the Purchased Programs, in each case upon the terms and conditions set forth herein; and

WHEREAS, it is intended that the transactions contemplated by this Agreement, taken together with the transactions contemplated by the Preferred Stock Purchase Agreement, shall be treated as an exchange described in Section 351 of the Internal Revenue Code of 1986, as amended (the "Code").

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth below and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

ARTICLE 1

DEFINITIONS; CERTAIN RULES OF INTERPRETATION

1.1 Definitions. As used in this Agreement, the following terms shall have the meanings set forth or as referenced below:

"409A Plan" shall have the meaning specified in Section 7.2(e).

"Ablexis Agreement" shall mean that certain Consortium and License Agreement dated as of December 22, 2009, by and between Aliva Biopharmaceuticals, Inc. and Pfizer, as amended from time to time.

"Ablexis Antibodies" shall mean antibodies generated under the Ablexis Agreement in connection with any Purchased Assets.

"Affiliate" shall mean (a) in the case of an individual, the individual's spouse (or civil partner) and the members of the immediate family (which for purposes of this definition shall include only parents, siblings, children and spouses (or civil partners) of the foregoing) of (i) the individual, (ii) the individual's spouse (or civil partner) and (iii) any Entity that directly or indirectly, through one or more intermediaries, is controlled by, or is under common control with, any of the foregoing individuals, or (b) in the case of an Entity, another Entity or a Person that directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such Entity; *provided that*, for the purposes of this definition, "control"

(including with correlative meanings, the terms "controlled by" and "under common control with"), as used with respect to any Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by contract or otherwise.

"Agreement" shall have the meaning specified in the Preamble.

"Allogeneic Product" shall mean a product for administration to humans, which embodies, incorporates or includes a CAR-T.

"Annual Net Sales" shall have the meaning specified in Section 5.1(c)(ii).

"Arising Patent" shall mean:

(a) (i) any Exclusive Know-How Patent (as that term is defined in the Patent and Know-How License Agreement), (ii) any Non-Exclusive Know-How Patent (as that term is defined in the Patent and Know-How License Agreement) and (iii) any non-provisionals, continuations, divisions, renewals, reexaminations, reissues, reexaminations, extensions, restorations, and foreign counterparts thereof, and any and all patents granted on the Patents in clauses (i) and (ii); and

(b) any non-provisionals, continuations, divisions, renewals, reexaminations, reissues, reexaminations, extensions, restorations, and foreign counterparts of a Transferred Pfizer Patent, and any and all patents granted thereon.

"Assigned Contracts" shall have the meaning specified in Section 2.1(a).

"Assigned Patent" shall mean any Patent included in the Pfizer Assigned IP Rights.

"Assignment Consent" shall have the meaning specified in Section 2.5(a).

"Assumed Liabilities" shall have the meaning specified in Section 2.3.

"Books and Records" shall have the meaning specified in Section 2.1(d).

"Business Day" shall mean any day other than (a) a Saturday or a Sunday or (b) a day on which banking institutions are closed in New York, New York or San Francisco, California.

"Calendar Quarter" shall mean the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31.

"Calendar Year" shall mean each twelve (12) month period commencing on January 1.

"Cap" shall have the meaning specified in Section 14.5(a).

"CAR" shall mean a chimeric antigen receptor expressed from an experimentally validated viral construct with specific molecular architecture and signaling domain sequences.

"CAR-T" shall mean a population of allogeneic T-cells with a unique set of experimentally validated biologic attributes expressing a CAR construct.

"CD19 Target" shall mean the Target corresponding to the B lymphocyte antigen Cluster of Differentiation 19.

"CD52 Product" shall mean a product that (a) comprises an antibody that binds CD52 and has the Pfizer identifier number of [***] and (b) incorporates, or is made, developed, or optimized, by the use of, the Transferred Pfizer Know-How.

"Cellectis" shall mean Cellectis SA.

"Class A Preferred Stock" shall mean, collectively, the Series A Preferred Stock and the Series A-1 Preferred Stock.

"Clinical Trial" shall mean a human clinical study conducted on sufficient numbers of human subjects that is designed to (a) establish that a pharmaceutical product is reasonably safe for continued testing, (b) investigate the safety and efficacy of the pharmaceutical product for its intended use, and to define warnings, precautions and adverse reactions that may be associated with the pharmaceutical product in the dosage range to be prescribed or (c) support Regulatory Approval of such pharmaceutical product or label expansion of such pharmaceutical product.

"Closing" shall have the meaning specified in Section 4.1.

"Closing Date" shall have the meaning specified in Section 4.1.

"Code" shall have the meaning specified in the Preamble.

"Combination Product" shall have the meaning specified in the definition of "Net Sales".

"Commercially Reasonable Efforts" shall mean, with respect to a party's obligations or activities under this Agreement, the carrying out of such obligations or activities with a level of effort and resources consistent with the commercially reasonable practices normally devoted by a similarly situated company, including, as applicable, [***] it being understood that commercially reasonable efforts may not require that such party develop each and every product in its portfolio or as to which it has rights simultaneously, and it being further understood that, without limiting any obligation in this Agreement, it is possible that the application of Commercially Reasonable Efforts as described in the foregoing definition may be consistent with the termination of the development of a product in certain circumstances.

"Common Stock" shall mean the common stock, par value $0.001 per share of NewCo.

"Confidential Information" shall have the meaning specified in Section 9.6(a).

"Confidential Disclosure Agreement" shall mean that certain confidentiality agreement between Two River Consulting, LLC, a Delaware limited liability company, and Pfizer, dated November 8, 2017.

"Confidential Information Agreements" shall have the meaning specified in Section 7.20.

"Consent" shall mean any approval, consent, ratification, permission, waiver or authorization (including any Governmental Approval).

"Consideration" shall have the meaning specified in Section 3.1.

"Consolidated Return" shall mean any affiliated consolidated, combined, or unitary Tax Return filed with respect to a group that includes a Pfizer Party (or any other Affiliate of the Pfizer Parties).

"Continuation Period" shall have the meaning specified in Section 10.1(b).

"Contract" shall mean any written or oral agreement, contract, obligation, promise, understanding, arrangement, license, or legally binding commitment or undertaking of any nature, other than a Pfizer Benefit Plan.

"Copyrights" shall mean all copyrightable works of authorship and all copyrights and applications, throughout the world, whether published or unpublished, including rights to prepare, reproduce, perform, display and distribute copyrighted works and copies, compilations and derivative works thereof.

"Cooperation Period" shall have the meaning specified in Section 2.5(a).

"Cover", "Covering" and "Covered" shall mean, with respect to a Patent and an invention, that, in the absence of ownership of or a license under such Patent, the practice of such invention (e.g., with respect to a Patent in the U.S., the manufacture, use, sale, offer for sale or importation of such invention) would infringe a Valid Claim of such Patent (assuming, in the case of a pending patent application, that the claims of such patent application as then existing were issued).

"Covered Benefit Plan" shall have the meaning specified in Section 6.8(d).

"Damages" shall mean losses, damages, settlements, awards, fines, penalties, fees, liabilities, costs, including costs of investigation, or expenses of any nature, including reasonable attorneys' fees.

"Deductible" shall have the meaning specified in Section 14.5(a)

"Developed Pfizer Targets" shall mean the following Targets: BCMA, FLT3, CD33, EGFRVIII, CD70, MUC16, DLL3, Claudin18.2, and Wt1.

"Development Update" shall have the meaning specified in Section 5.2(b)(iv)(A).

"Disclosing Party" shall have the meaning specified in Section 9.6(a).

"Drop-Dead Date" shall have the meaning specified in Section 13.1(d).

"Early Access Program" shall mean any program that provides patients with a Product prior to Regulatory Approval in any country or region in the Territory and in which the use of such Product is not primarily intended to obtain information about the safety or effectiveness of a drug. "Early Access Programs" shall include treatment INDs / protocols, and named patient programs.

"Early Stage Target" shall mean the following Targets: [***].

"Effective Date" shall have the meaning specified in the Preamble.

"Employee Transfer Date" shall mean May 1, 2018 or such other date as is mutually agreed to between the parties.

"Enforceability Exceptions" shall have the meaning specified in Section 6.2(b).

"Entity" shall mean any corporation (including any non-profit corporation), general partnership, limited partnership, limited liability partnership, joint venture, estate, trust or company (including any limited liability company or joint stock company) or other similar entity.

"Equity Commitment Letters" shall have the meaning specified in Section 7.9.

"Equity Consideration" shall have the meaning specified in Section 3.1.

"Equity Consideration Cancellation" shall have the meaning specified in Section 14.8.

"ERISA" shall mean the Employee Retirement Income Security Act of 1974, as amended.

"Excluded Assets" shall have the meaning specified in Section 2.2.

"Excluded Liabilities" shall have the meaning specified in Section 2.4.

"Excluded Taxes" shall mean, without duplication, (a) all Taxes of the Pfizer Parties or any of their Affiliates, or for which the Pfizer Parties or any of their Affiliates is or are liable (including under any common law doctrine of de facto merger or transferee or successor liability or otherwise by operation of contract or Law), for any taxable period, (b) all Taxes related to the Excluded Assets or Excluded Liabilities for any taxable period, (c) all Taxes relating to the Purchased Programs, the Purchased Assets, the Transferred Employees, or the Assumed Liabilities, in each case with respect to any Pre-Closing Tax Period (including the portion of any Straddle Period through the end of the Closing Date, as determined in accordance with Section 12.2(e)) and (d) all Taxes, if any, imposed on NewCo under Section 1445 or 1446(f) of the Code in connection with the transactions contemplated by this Agreement.

"Exclusive Group 3 Know-How" shall have the meaning set forth in the Patent and Know-How License Agreement.

"Exclusive Group 3 Patents" shall have the meaning set forth in the Patent and Know-How License Agreement.

"FCPA" shall have the meaning specified in Section 7.23.

"FD&C Act" shall mean the United States Federal Food, Drug, and Cosmetic Act, as amended, and the rules and regulations promulgated thereunder.

"FDA" shall mean the United States Food and Drug Administration and any successor agency.

"Financing" shall have the meaning specified in Section 7.9.

"Financing Agreements" shall mean, collectively, the Preferred Stock Purchase Agreement, the Investors' Rights Agreement, the Right of First Refusal and Co-Sale Agreement and the Voting Agreement.

"First Commercial Sale" shall mean, with respect to a given Product in a given country or region of the Territory, the first sale of such Product by NewCo, its Affiliates or Sublicensees to a Third Party in such country after such Product has been granted Regulatory Approval by the appropriate Governmental Authority for commercial sale in such country; *provided* that, any sale occurring under an Early Access Program shall be deemed a "First Commercial Sale" for purposes hereunder.

"Founders" shall mean David D. Chang, Joshua A. Kazam, Veer Bhavnagri, David M. Tanen and Arie S. Belldegrun.

"GAAP" shall mean United States generally accepted accounting principles in effect from time to time.

"General Assignment and Bill of Sale" shall have the meaning specified in Section 4.2(a).

"Governmental Approval" shall mean any: (a) permit, license, certificate, concession, Consent, clearance, confirmation, exemption, franchise, certification, designation, rating, registration, variance, qualification or accreditation issued, granted, given or otherwise made available by or under the authority of any Governmental Authority or pursuant to any Law; (b) with respect to a pharmaceutical or biological product in a country or regulatory jurisdiction, the act of a Governmental Authority necessary for the testing, manufacturing, marketing, labeling, distribution, advertising, commercial sale or use of such product in such country or regulatory jurisdiction, including the approval of an Investigational New Drug Application, Biologic License Application or New Drug Application by the FDA or any analogous approval in jurisdictions other than the United States, but, in all cases, excluding any separate pricing or reimbursement approval, where required ("Regulatory Approval"); or (c) right under any Contract with any Governmental Authority.

"Governmental Authority" shall mean any: (a) nation, principality, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; (c) governmental or quasi-governmental authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, board, instrumentality, officer, official, representative, organization, unit, body or Entity and any court or other tribunal); (d) multinational organization or body; or (e) individual, Entity or body exercising, or entitled to exercise, any executive, legislative, judicial, administrative, arbitral, regulatory, police, military or Tax Authority or power.

"Group 1 Pfizer IP Rights" shall mean those Intellectual Property Rights set forth on Schedule 2.1(c)(1) under the heading "Group 1 Pfizer IP Rights".

"Group 2 Pfizer IP Rights" shall mean those Intellectual Property Rights set forth on Schedule 2.1(c)(2) under the heading "Group 2 Pfizer IP Rights".

"Group 3 Pfizer IP Rights" shall mean those Intellectual Property Rights set forth on Schedule 4.2(c) under the heading "Group 3 Pfizer IP Rights" under which NewCo is granted licenses from Pfizer pursuant to the Patent and Know-How License Agreement.

"IFRS" shall mean International Financial Reporting Standards in effect from time to time.

"Inactive Employee" shall have the meaning specified in Section 10.1(a).

"IND" shall mean an Investigational New Drug Application submitted under the FD&C Act, or an analogous application or submission with any analogous agency or Governmental Authority outside of the United States for the purposes of obtaining permission to conduct Clinical Trials.

"Indemnitee" shall have the meaning specified in Section 14.4.

"Indemnitor" shall have the meaning specified in Section 14.4.

"Initial NewCo Organizational Documents" shall have the meaning specified in Section 7.1(b).

"Intellectual Property Rights" or "IP Rights" shall mean any or all rights in and to intellectual property and intangible industrial property rights of a Pfizer Party, including Patents, Trade Secrets, Copyrights, Trademarks, Know-How, internet domain names and any rights similar, corresponding or equivalent to any of the foregoing anywhere in the world.

"Investors' Rights Agreement" shall have the meaning specified in Section 4.2(e).

"IRS" shall mean the United States Internal Revenue Service.

"Key Assigned Contract" shall mean the Pfizer-Cellectis Agreement, the Pfizer-Servier Agreement and the WuXi Agreement.

"Key Assigned Contract Patents" shall mean (a) those Patents licensed to Pfizer under the Pfizer-Servier Agreement or the Pfizer-Cellectis Agreement immediately prior to the Closing Date and (b) any Patents that, under the terms of the Pfizer-Servier Agreement or the Pfizer-Cellectis Agreement, would be licensed to Pfizer following the Closing if, in each case, Pfizer had remained a party thereto, in each case of clauses (a) and (b) taking into account any field or use limitations in effect under such relevant Key Assigned Contract.

"Key Employee" shall mean Joshua A. Kazam, David M. Tanen, and any other executive-level employee (including division director and vice president-level positions) as well as any employee or consultant who either alone or in concert with others develops, invents, programs or designs any of the NewCo Intellectual Property.

"Know-How" shall mean any non-public or proprietary information, inventions, discoveries, compounds, compositions, formulations, formulas, practices, procedures, processes, methods, knowledge, technology, techniques, designs, drawings, correspondence, computer programs, documents, apparatus, results, strategies, Regulatory Filings, information and

---

submissions pertaining to, or made in association with, filings with any Governmental Authority or patent office, data (including pharmacological, toxicological, non-clinical and clinical data, analytical and quality control data, manufacturing data and descriptions, market data, financial data or descriptions), devices, assays, chemical formulations, specifications, material, product samples and other samples, physical, chemical and biological materials and compounds, whether or not patentable.

"Law" shall mean any federal, state, local, foreign and supranational or other law, statute, code, constitution, treaty, principle of common law, directive, ordinance, rule, regulation or Order, or any similar provision or requirement having the force or effect of law, of any Governmental Authority.

"Liability" shall mean any and all debts, liabilities and obligations, whether fixed, contingent or absolute, matured or unmatured, accrued or not accrued, determined or determinable, secured or unsecured, disputed or undisputed, subordinated or unsubordinated, or otherwise.

"Lien" shall mean any lien, claim, mortgage, encumbrance, pledge, license, security interest, equity or charge of any kind.

"Material Adverse Effect" shall mean any event, change or effect that, when taken individually or together with all other adverse events, changes and effects (a) would reasonably be expected to be materially adverse to the condition (financial or otherwise), assets, business or operations of the Purchased Programs, the Purchased Assets and the Products, taken as a whole, or (b) would prevent or materially delay the Pfizer Parties' consummation of the Transactions; *provided, however*, that any events, changes or effects will not be deemed to constitute a Material Adverse Effect to the extent resulting from (1) general economic, political or market conditions in the pharmaceutical industry as a whole, but only to the extent that such changes or conditions do not have a materially disproportionate effect on the Purchased Programs, taken as a whole, compared with other industry participants; (2) the impact of the Transactions, including the announcement or pendency of this Agreement or the Transactions, on relationships, contractual or otherwise, with customers, suppliers, distributors, partners or employees; (3) any failure by any Pfizer Party or the Purchased Programs to meet internal projections or forecasts for any period (provided that the underlying causes of such failure may, to the extent applicable, be considered in determining whether there has been a Material Adverse Effect); (4) acts of war or terrorism (or the escalation of the foregoing) or natural disasters or other force majeure events; (5) changes in any Law applicable to the Purchased Programs or applicable accounting regulations or principles or the interpretation thereof; (6) compliance by Pfizer or any of its Affiliates with a request by NewCo that Pfizer or any of its Affiliates take an action (or refrain from taking an action) to the extent such action or inaction is in compliance with such request; or (7) any action taken by Pfizer or any of its Affiliates as required by this Agreement or with NewCo's written consent.

"Marginal Royalty Rates" shall have the meaning specified in Section 5.1(c)(ii).

"Milestone Event" shall have the meaning specified in Section 5.1(a) .

"Milestone Payment" shall have the meaning specified in Section 5.1(a).

"Net Sales" shall mean, in the case of sales of any Product(s) by or for the benefit of NewCo, its Affiliates or Sublicensees (for the purpose of this definition only, the "Seller") in the Royalty Territory applicable to such Product to independent, unrelated persons, including any distributor who purchases for purposes of resale to end-users (such a distributor to expressly not be deemed a Seller under this definition and, along with other such independent, unrelated persons, for the purpose of this definition only, "Buyers") in bona fide arm's length transactions (except as provided below with respect to clinical trial samples), the gross amount billed or invoiced by Seller with respect to such Product during the applicable period, less the following deductions, in each case to the extent actually paid, granted or accrued by such Seller (each as recognized by GAAP applied consistently throughout the calculation, as applicable) or allowed and taken by such Buyers and, in each case, not otherwise recovered by or reimbursed to Seller in connection with such Product (for the purpose of this definition only, "Permitted Deductions"): [

(a) trade, cash, promotional, prompt payment and quantity discounts;

(b) uncollectible amounts or reasonable reserves accrued therefor (it being understood that any subsequent reductions in such accrual amounts due to collections in subsequent periods shall be included in Net Sales when such reductions occur);

(a) returns, refunds, allowances, rebates and chargebacks;

(b) customs or excise duties, excise (including, but not limited to, the amount of any annual branded prescription drug manufacturer and importer fees attributable to the Products paid by the Seller), sales or use Taxes, consumption Tax, value added Tax or other Taxes (except income Taxes) or duties relating to sales Taxes on sales (such as excise, sales or use Taxes or value added Tax);

(c) Taxes on sales of pharmaceutical specialties reimbursed pursuant to a government health service, health insurance, social insurance or similar social services program;

(d) freight, insurance, packing costs and other transportation charges to the extent added to the sales price;

(e) amounts repaid or credits taken by reason of rejections, defects or returns or because of retroactive price reductions, or due to recalls or Laws requiring rebates;

(f) rebates taken by or fees paid to distributors, wholesalers, group purchasing organizations, pharmacy benefit management companies and management care entities and charge-backs, including any discount, rebate or reimbursement program applicable to a Product under which Seller provides to low income, uninsured or other patients the opportunity to purchase Products at discounted prices;

(g) rebates and/or discounts on sales of Products given to health insurance and other types of payers due to specific agreements ("claw-back" type of agreements) involving the Products; and

(h) any other specifically identifiable amounts included in gross amounts invoiced for the Products, to the extent such amounts are customary deductions from net sales calculations in the pharmaceutical or biotechnology industries in the applicable country or countries for reasons substantially equivalent to those listed above.

"Net Sales" shall not include any consideration received with respect to a sale, use or other disposition of any Product in a country for development purposes or as samples or for charitable purposes. Notwithstanding the foregoing, the amounts invoiced by NewCo, its Affiliates, or Sublicensees for the sale of Product among NewCo, its Affiliates, or Sublicensees for resale shall not be included in the computation of Net Sales hereunder and Net Sales shall be the gross invoice or contract price charged to the Third Party customer for that Product, less the Permitted Deductions. All of the foregoing elements of Net Sales calculations shall be determined in accordance with GAAP or IFRS, as applicable to the Seller.

Notwithstanding the foregoing, if a Product either (i) is sold in the form of a combination product containing both the Product and one or more independently therapeutically active pharmaceutical molecules (i.e. a chemical entity performing a therapeutic or prophylactic function distinct from the enhancement of the activity of the Product itself) that are not other Products or (ii) is sold in a form that contains (or is sold bundled with for the same price) a delivery device therefor (in either case of (i) or (ii), a "Combination Product" and any such other independently therapeutically active pharmaceutical molecules or delivery device, an "Other Component" of such Combination Product), the Net Sales of such Product for the purpose of calculating royalties owed under this Agreement for sales of such Product shall be determined by multiplying the actual Net Sales of the Combination Product (calculated using the above provisions) by the fraction A/(A+B), where A is the invoice price on a country-by-country basis, during the Royalty Term in question, of the Product when sold separately and B is the invoice price on a country-by-country basis, during the Royalty Term in question, of the other active pharmaceutical molecule or delivery device when sold separately. If any other active pharmaceutical molecule or delivery device in the combination is not sold separately in a country, Net Sales shall be calculated by multiplying actual Net Sales of such Combination Product by a fraction: (A/C), where A is the invoice price of the Product in such country if sold separately, and C is the invoice price of the Combination Product in such country. If neither the Product nor any other active pharmaceutical molecule or delivery device in the Combination Product is sold separately, the adjustment to Net Sales shall be determined by the parties in good faith to reasonably reflect the fair market value of the contribution of the Product in the Combination Product to the total fair market value of such Combination Product; provided that in the event the parties do not agree on such relative value contributions, either party may require that the matter be referred to an independent expert selected by agreement of the parties. Except in the case of fraud or manifest error on the part of such independent expert, the decision of such independent expert as to such relative value contributions shall be binding upon the parties. The costs of the independent expert shall be borne by the non-prevailing party.

"NewCo" shall have the meaning specified in the Preamble.

"NewCo 401(k) Plan" shall have the meaning specified in Section 10.1(g).

"NewCo Damages" shall have the meaning specified in Section 14.1.

"NewCo Fundamental Representations" shall have the meaning specified in Section 11.2(a).

"NewCo Indemnified Persons" shall have the meaning specified in Section 14.1.

"NewCo Intellectual Property" shall mean all patents, patent disclosures and all related continuation, continuation-in-part, divisional, reissue, reexamination, utility model, renewals, extensions, certificate of invention and design patents, patent applications, registrations and applications for registrations, registered and unregistered trademarks, trademark applications, registered and unregistered service marks, service mark applications, tradenames, copyrights, trade secrets, domain names, information and proprietary rights and processes, similar or other intellectual property rights or know-how, subject matter of any of the foregoing, tangible embodiments of any of the foregoing, licenses in, to and under any of the foregoing, and any and all such cases that are owned or used by, or are necessary to, NewCo in the conduct of the NewCo's business as now conducted and as presently proposed to be conducted.

"Non-Assignable Asset" shall have the meaning specified in Section 2.5(a).

"Order" shall mean any (a) temporary, preliminary or permanent order, judgment, injunction, edict, decree, ruling, pronouncement, determination, decision, opinion, verdict, sentence, stipulation, writ or award that is or has been issued, made, entered, rendered or otherwise put into effect by or under the authority of any court, administrative agency or other Governmental Authority or any arbitrator or arbitration panel; or (b) settlement or conciliation agreement with any Governmental Authority that is or has been entered into in connection with any Proceeding.

"Organizational Documents" shall mean a certificate of incorporation, bylaws, limited partnership agreement, limited liability company agreement or comparable constituent or organizational documents.

"Other Assets" shall have the meaning specified in Section 2.1(f).

"Other Investors" shall mean TPG Carthage Holdings, L.P., a Delaware limited partnership, The Rise Fund Carthage, L.P., a Delaware limited partnership, VVAG Special Fund LLC, a Delaware limited liability company, Vida Ventures, LLC, a Delaware limited liability company, The Regents of the University of California, the Seaview Trust, the Belldegrun Family Trust, Franz Humer, Owen Witte, Chang 2006 Family Trust, Christine Cassiano, Joshua A. Kazam, KB/V LLC, James Economou, Allan Pantuck, Linda Barnes, Stuart Holden, Roy Doumani, Kiernan Family Trust, Vera Kiernan Trustee, David M. Tanen, Veer Bhavnagri and, if it enters into an Equity Commitment Letter prior to the Closing, Gilead Sciences, Inc.

"Other Royalty-Bearing Product" shall mean any Allogeneic Product that (a) Targets a Target that is not a Pfizer Target, (b) is either (i) Covered by a Valid Claim of any Transferred Pfizer Patent, Arising Patent or Key Assigned Contract Patent or (ii) incorporates or is made, discovered, developed, or derived from the use of Transferred Pfizer Know-How and (c) for which an IND is first filed on or before the fifth (5_{th}) anniversary of the Closing Date.

"Patent and Know-How License Agreement" shall have the meaning specified in Section 4.2(c).

"Patent Assignment" shall have the meaning specified in Section 4.2(b).

"Patents" shall mean any and all (a) issued patents, (b) pending patent applications, including all non-provisional or provisional applications, substitutions, continuations, continuations-in-part, divisions and renewals, and all patents granted thereon, (c) patents-of-addition, reissues, reexaminations and extensions or restorations by existing or future extension or restoration mechanisms, including patent term adjustments, patent term extensions, supplementary protection certificates or the equivalent thereof, (d) inventor's certificates, (e) other forms of government-issued rights substantially similar to any of the foregoing and (f) United States and foreign counterparts of any of the foregoing.

"Permits" shall mean, with respect to any Person, any license, franchise, permit, approval or other similar authorization issued by, or otherwise granted by, any Governmental Authority to which or by which such Person is subject or bound.

"Permitted Lien" shall mean (a) any Lien for Taxes not yet due or delinquent as of the Closing Date or which are being contested in good faith by appropriate Proceedings and for which appropriate reserves have been established under GAAP, (b) vendors', mechanics', materialmen's, carriers', workers', landlords', repairmen's, warehousemen's, construction and other similar Liens arising or incurred in the ordinary and usual course of business and consistent with past practice or with respect to Liabilities that are not yet due and payable or, if due, are not delinquent or are being contested in good faith by appropriate Proceedings, (c) Liens imposed or promulgated by applicable Law or any Governmental Authority with respect to real property, including zoning, building or similar restrictions, (d) pledges or deposits in connection with workers' compensation, unemployment insurance, and other social security legislation, (e) Liens imposed by securities Laws, (f) Liens relating to intercompany borrowings among a person and its wholly owned subsidiaries, provided that, as to the Pfizer Parties and the Purchased Assets, the Products and/or the Purchased Programs, such Liens are released and extinguished prior to or at the Closing, (g) defects, irregularities or imperfections of title which do not materially interfere with, or materially impair the use of, the property or assets subject thereto, or (h) Liens resulting from the action or inaction of NewCo or any of its Affiliates.

"Person" shall mean any individual, Entity or Governmental Authority.

"Personal Information" shall have the meaning specified in Section 7.24.

"Pfizer" shall have the meaning specified in the Preamble.

"Pfizer Assigned IP Rights" shall mean the Group 1 Pfizer IP Rights and the Group 2 Pfizer IP Rights.

"Pfizer Benefit Plan" shall mean each "employee benefit plan" as defined in Section 3(3) of ERISA (whether or not subject to ERISA) and each other pension, retirement, profit-sharing, deferred compensation, change in control, retention, employment, independent contractor, consulting, equity or equity-based compensation, stock purchase, employee stock purchase, severance or termination pay, vacation or paid time-off, bonus or other incentive, medical, health or welfare benefit, retiree medical, health or welfare benefit, life insurance, medical reimbursement, fringe benefit or other plan, agreement, arrangement, program, policy or contract (including any related funding mechanism), in each case, whether oral or written, funded or

unfunded, or insured or self-insured, that is sponsored, maintained, contributed to or required to be contributed to by Pfizer or any of its Subsidiaries.

"Pfizer-Cellectis Agreement" shall mean that certain Research Collaboration and License Agreement between Pfizer, Inc. and Cellectis SA dated June 17, 2014, as amended as of the Effective Date.

"Pfizer Damages" shall have the meaning specified in Section 14.2.

"Pfizer Damages Fraction" shall have the meaning specified in Section 14.2.

"Pfizer Fundamental Representations" shall have the meaning specified in Section 11.1(a).

"Pfizer Indemnified Persons" shall have the meaning specified in Section 14.2.

"Pfizer Parties" shall have the meaning set forth in the Preamble.

"Pfizer Savings Plan" shall mean the Pfizer Savings Plan (plan number 002).

"Pfizer-Servier Agreement" shall mean that certain Exclusive License and Collaboration Agreement between Servier and Pfizer, Inc. dated October 30, 2015.

"Pfizer Subsidiaries" shall mean the Subsidiaries of Pfizer set forth on Exhibit A.

"Pfizer Target" shall mean (a) the Developed Pfizer Targets, (b) the Early Stage Targets, and (c) the ROR1 Target and the CD19 Target.

"Pfizer Territory" shall, with respect to a Product, mean the United States and any other countries included in the "Pfizer Territory" as defined for such Product in the Pfizer-Servier Agreement (including to the extent the license conversion provisions in such agreement apply); *provided* that in the event NewCo, its Affiliate or Sublicensee otherwise obtains the right to sell or otherwise commercialize such Product in any country or countries other than the United States, including by termination or amendment, in whole or in part, of the Pfizer-Servier Agreement as it may be amended from time to time, the Pfizer Territory shall include such country or countries with respect to such Product.

"Pfizer's knowledge" and similar phrases shall mean the actual knowledge of the individuals listed on Schedule 1.1(a) after due and reasonable inquiry.

"Post-Closing NewCo Organizational Documents" shall have the meaning specified in Section 7.1(b).

"Post-Closing Tax Period" shall mean any Tax period beginning after the Closing Date and, in the case of a Straddle Period, the portion of such period beginning after the Closing Date.

"Pre-Closing Tax Period" shall mean any Tax period ending on or before the Closing Date and, in the case of a Straddle Period, the portion of such period ending on and including the Closing Date.

"Preferred Stock Purchase Agreement" shall have the meaning specified in Section 4.2(f).

"Price Approval" shall mean, in any country where a Governmental Authority authorizes reimbursement for, or approves or determines pricing for, pharmaceutical products, receipt (or, if required to make such authorization, approval or determination effective, publication) of such reimbursement authorization or pricing approval or determination (as the case may be).

"Proceeding" shall mean any action, suit, litigation, arbitration, proceeding (including any civil, criminal, administrative, investigative or appellate proceeding), prosecution, hearing, inquiry, audit, examination or investigation that is, has been or may in the future be commenced, brought, conducted or heard at law or in equity or before any Governmental Authority.

"Product" shall mean any Royalty-Bearing Product or Other Royalty-Bearing Product.

"Prospective Employees" shall have the meaning specified in Section 6.8(a).

"Purchased Assets" shall have the meaning specified in Section 2.1.

"Purchased Inventory" shall have the meaning specified in Section 2.1(b).

"Purchased Programs" shall mean the programs conducted by the Pfizer Parties as of the date hereof related to developing, manufacturing, commercializing, distributing, promoting, packaging, importing, marketing, selling and otherwise exploiting the Products with respect to the Pfizer Targets, but for the avoidance of doubt, excluding the Excluded Assets.

"Purchased Programs Registered Intellectual Property" shall have the meaning specified in Section 6.9(a).

"Purchased Programs Permits" shall have the meaning specified in Section 6.4.

"Receiving Party" shall have the meaning specified in Section 9.6(a).

"Regulatory Approval" shall have the meaning specified in the definition of "Governmental Approval".

"Regulatory Filing" shall mean any documentation constituting or relating to or supporting any filing or application with any Governmental Authority with respect to a Product, including any documents submitted to any Governmental Authority, including INDs, applications for Regulatory Approval, and all correspondence with any Governmental Authority with respect to any Product (including minutes of any meetings, telephone conferences or discussions with any Governmental Authority).

"Regulatory Laws" shall mean the following Laws: (a) the Federal Food, Drug, and Cosmetic Act, as amended, and all regulations promulgated thereunder, (b) the federal False Claims Act (42 U.S.C. § 1320a-7b(a)), as amended, (c) the Physician Payments Sunshine Act, (d) the Patient Protection and Affordable Care Act, (e) the federal Medicare and Medicaid statutes, (f) the federal Anti-Kickback Statute, 42 U.S.C. § 1320a-7b, (g) the federal Physician Self-Referral (Stark) Law, 42 U.S.C. § 1395nn, (h) the federal Civil Monetary Penalties Law, 42 U.S.C. § 1320a-7a, (i) the Federal Trade Commission Act, (j) the Public Health Service Act and

(k) any other Laws governing research, development, clinical testing, investigational use, marketing clearance, marketing approval, manufacturing, servicing, packaging, labeling, promotion, sale, import or export of a pharmaceutical product.

"Representatives" shall mean officers, directors, employees, agents, advisors and Affiliates.

"Restated Bylaws" shall have the meaning specified in Section 7.1(b).

"Restated Certificate" shall mean the Amended and Restated Certificate of Incorporation of NewCo, adopted and filed by NewCo on or before the closing of the transaction contemplated by the Preferred Stock Purchase Agreement.

"Right of First Refusal and Co-Sale Agreement" shall have the meaning specified in Section 4.2(g).

"ROR1 Target" shall mean the Target corresponding to Tyrosine-protein kinase transmembrane receptor ROR1, also known as neurotrophic tyrosine kinase, receptor-related 1 (NTRKR1).

"Royalty-Bearing Product" shall mean either (a) any CD52 Product or (b) any Allogeneic Product that Targets a Pfizer Target and:

(i) is, on a country-by-country basis, Covered by a Valid Claim of (A) any Transferred Pfizer Patent, (B) any Arising Patent, or (C) any Key Assigned Contract Patent;

(ii) incorporates or is made, discovered, developed, or derived from the use of Transferred Pfizer Know-How; or

(iii) meets the definition of a (A) "Pfizer Licensed Product" under the Pfizer-Cellectis Agreement, (B) "Pfizer Licensed Product" under the Pfizer-Servier Agreement or (C) "Servier Licensed Product" under the Pfizer-Servier Agreement.

"Royalty Term" shall mean, with respect to a given Product in a given country in the Territory, the period beginning upon the First Commercial Sale of such Product in such country and ending on the later of (a) expiration of the last to expire Valid Claim of (i) any applicable Transferred Pfizer Patent, (ii) any Arising Patent or (iii) any Key Assigned Contract Patent, in each case ((i), (ii) or (iii)) Covering such Product in such country or (b) twelve (12) years from First Commercial Sale of such Product in such country.

"Royalty Territory" shall mean (i) for any Product Targeting the Pfizer Targets CD19 or ROR1, the Pfizer Territory and (ii) for any other Product, all countries of the world.

"Sales Milestone Payment" shall have the meaning specified in Section 5.1(b).

"Series A Preferred Stock" shall mean the Company's Series A Preferred Stock, $0.001 par value per share.

"Series A-1 Preferred Stock" shall mean the Company's Series A-1 Preferred Stock, $0.001 par value per share.

"Servier" shall mean, collectively, Les Laboratoires Servier and Institut de Recherches Internationales Servier.

"Servier Product" shall mean any Product Targeting the Pfizer Targets CD19, ROR1 and EGFRVIII, and as to which either (i) Cellectis has granted Servier a license to develop and commercialize such Product in the Servier Territory, prior to the Effective Date, and which Servier has granted to Pfizer a sublicense under such rights in the United States pursuant to the Pfizer-Servier Agreement, prior to the Effective Date, or (ii) Pfizer has granted Servier a license to develop and commercialize such Product in the Servier Territory, under the Pfizer-Servier Agreement, prior to the Effective Date; *provided* that a Product Targeting EGFRVIII will no longer be deemed a Servier Product under this Agreement if Servier no longer is granted such license referred to in clause (ii) from Pfizer or its assignee under the Pfizer-Servier Agreement, as it may be amended from time to time.

"Servier Territory" shall have the meaning as set forth in the Pfizer-Servier Agreement.

"Set-off" shall have the meaning specified in Section 14.8.

"Shared Contracts" shall mean all Contracts listed on Schedule 2.6, which relate in part, but not exclusively, to the Purchased Programs.

"Stock Plan" shall have the meaning specified in Section 7.2(b)

"Straddle Period" shall have the meaning specified in Section 12.2(e).

"Sublicensee" shall mean any Person, including any assignee, transferee, licensee or sublicensee of NewCo or its Affiliates, to whom NewCo or its Affiliate has granted, including via sale, assignment, license, sublicense or other transfer of assets, any rights (a) assigned or otherwise transferred to NewCo or its Affiliates under this Agreement or (b) licensed or sublicensed to NewCo or its Affiliates under the Patent and Know-How License Agreement.

"Subsidiary" shall mean, with respect to any Person, any Entity in which such Person has a fifty percent (50%) or greater interest.

"Target" shall mean (a) a specific biological molecule that is identified by a GenBank accession number or similar information, or by its amino acid or nucleic acid sequence, and (b) any biological molecule substantially similar in amino acid or nucleic acid sequence that has substantially the same biological function as a molecule disclosed in clause (a), including any naturally occurring mutant or allelic variant of a molecule disclosed in clause (a), including naturally occurring variants, mutants, transcriptional and post-transcriptional isoforms (e.g., alternative splice variants), and post-translational modification variants (e.g., protein processing, maturation and glycosylation variants); and (c) truncated forms (including fragments thereof) which have a biological function substantially similar to that of any biological molecules disclosed in clause (a) or clause (b).

"Targeting" shall mean, when used to describe the relationship between a molecule and a Target, that the molecule (a) binds to the Target (or a portion thereof) and (b) is designed or being developed to exert its biological effect in whole or in part through binding to such Target (or such portion thereof).

"Targets" shall mean, when used as a verb, the correlative meaning of "Targeting."

"Tax" shall mean all forms of taxation imposed by any Tax Authority, including all national, state or local taxation (including income, value added, alternative or add-on minimum, occupation, real and personal property, escheat or unclaimed property, social security, gross receipts, sales, use, production, transfer, registration, ad valorem, franchise, profits, license, withholding, payroll, employment, unemployment, disability, excise, severance, occupation, premium or windfall profit taxes, stamp, customs duties, capital stock, and other import or export duties, estimated and other taxes of any kind whatsoever), together with any interest, penalties, and additions to tax, whether disputed or not.

"Tax Authority" shall mean a Governmental Authority responsible for the imposition, assessment or collection of any Tax (domestic or foreign).

"Tax Contest" shall have the meaning specified in Section 12.3(a).

"Tax Referee" shall have the meaning specified in Section 12.2(c).

"Tax Return" shall mean any report, return, statement, declaration, notice, claim for refund, certificate or other document (including any related or supporting schedules, statements or information) filed or required to be filed with any Tax Authority, or required to be maintained by any Person, in connection with the determination, assessment, collection or payment of any Tax.

"Term" shall mean the period of time commencing on the Effective Date and extending on a country-by-country basis until the earlier of (a) the last to expire of any Royalty Term for any Product in such country in the Territory and (b) the termination of this Agreement in accordance with ARTICLE 13.

"Territory" shall have the meaning specified on Schedule 1.1(b).

"Territory Option Agreement" means that certain Option Letter, dated as of the Effective Date, by and between Pfizer and NewCo, wherein NewCo is granted an option by Pfizer to expand the Territory under certain conditions.

"Third Party" shall mean any Person other than Pfizer, NewCo or their respective Affiliates.

"Total Annual Net Sales" shall have the meaning specified in Section 5.1(b).

"Trade Secrets" shall mean all trade secrets under applicable law and other rights in know-how and confidential or proprietary information, processing, manufacturing or marketing information, including new developments, inventions, processes, ideas or other proprietary information that provide any Pfizer Party with advantages over potential or actual competitors

---

who do not know or use it and documentation thereof (including related papers, invention disclosures, blueprints, drawings, research data and results, flowcharts, diagrams, chemical compositions, formulae, diaries, notebooks, specifications, designs, methods of manufacture, processing techniques, data processing techniques, compilations of information, customer and supplier lists, pricing and cost information, and business and marketing plans and proposals) and all claims and rights related thereto.

"Trademarks" shall mean any and all trademarks, service marks, trade dress, logos, slogans, trade names, all material unregistered trademarks, together with all adaptations, derivations and combinations thereof, and all goodwill associated with any of the foregoing throughout the world.

"Transaction Agreements" shall mean this Agreement and the General Assignment and Bill of Sale, the Patent Assignment, the Patent and Know-How License Agreement, the Transition Services Agreement, the Territory Option Agreement, the Preferred Stock Purchase Agreement, the Investors' Rights Agreement, the Right of First Refusal and Co-Sale Agreement, the Voting Agreement and the Equity Commitment Letters.

"Transactions" shall mean, collectively, the transactions contemplated by this Agreement.

"Transfer Taxes" shall mean all federal, state, local or foreign sales (including bulk sales), use, VAT, transfer, real property transfer, recording, mortgage recording, license, stamp, stamp duty, documentary, conveyance, excise, registration, or similar Taxes that may be imposed in connection with the transfer of Purchased Assets.

"Transferred Employee" shall have the meaning specified in Section 10.1(a).

"Transferred Pfizer Know-How" shall mean Know-How included in the Pfizer Assigned IP Rights or the Group 3 Pfizer IP Rights licensed to NewCo pursuant to the Patent and Know-How License Agreement, including manufacturing Know-How, in each case which is maintained as a Trade Secret as of the Closing Date. Notwithstanding the foregoing, Transferred Pfizer Know-How shall not include any such Know-How which NewCo can demonstrate through competent, written evidence was known to NewCo or any of its Representatives (other than a Transferred Employee) prior to the Closing Date other than (a) from a Pfizer Party, its licensor or its Representative or (b) from a Third Party who is, or was at the relevant time of disclosure, under an obligation of confidentiality with respect to such Know-How.

"Transferred Pfizer Patents" shall mean the Assigned Patents and the Patents included in the Group 3 Pfizer IP Rights.

"Transition Services Agreement" shall have the meaning specified in Section 4.2(d).

"Treasury Regulations" shall mean the regulations promulgated under the Code by the United States Treasury and IRS.

"Valid Claim" shall mean: (a) a claim of any issued and unexpired patent that (i) has not been, disclaimed, revoked or held unenforceable or invalid by a decision of a Governmental Authority of competent jurisdiction from which no appeal can be taken, or by a decision of a Governmental Authority of competent jurisdiction that can be appealed, but with respect to

which an appeal has not taken within the time allowed for appeal, and (ii) has not been disclaimed or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise; or (b) a claim of any pending patent application that (i) has not been cancelled, withdrawn or abandoned, without being re-filed in another application in the applicable jurisdiction, (ii) has not been finally rejected by an administrative agency or other governmental action from which no appeal can be taken and (iii) has not been pending or filed more than [***] years from the earliest possible priority date for such patent application; provided that if such claim is later issued, it shall from the issuance date forward be deemed to be a Valid Claim.

"VAT" shall mean (i) value added tax goods and services tax and (ii) any other similar turnover, sales or purchase, tax or duty, in the case of each of clause (i) and clause (ii), levied by any jurisdiction whether central, regional or local.

"Voting Agreement" shall have the meaning specified in Section 4.2(h).

"Worker Notification Law" shall mean the United States Worker Adjustment and Retraining Notification Act of 1988 or similar state or local Law.

"WuXi Agreement" shall mean that certain Master Services Agreement between Pfizer and WuXi AppTec, Inc., dated December 4, 2015.

1.2 Rules of Interpretation. Except as otherwise explicitly specified to the contrary, (a) references to a Section, Article, Exhibit or Schedule mean a Section or Article of, or Schedule or Exhibit to, this Agreement, unless another agreement is specified, (b) the word "including" (in its various forms) means "including without limitation," (c) references to a particular statute or regulation include all rules and regulations thereunder and any predecessor or successor statute, rules or regulation, in each case as amended or otherwise modified from time to time, (d) words in the singular or plural form include the plural and singular form, respectively, (e) references to a particular Person include such Person's successors and assigns to the extent not prohibited by this Agreement, (f) "extent" in the phrase "to the extent" means the degree to which a subject or other thing extends, and such phrase does not mean simply "if," (g) the headings contained in this Agreement, in any Exhibit or Schedule hereto and in the table of contents to this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement, (h) the words "will" and "shall" shall be interpreted to have the same meaning, (i) unless otherwise specifically provided for herein, the term "or" shall not be deemed to be exclusive and (j) references to "$" shall mean U.S. dollars.

ARTICLE 2

THE TRANSACTION AGREEMENT

2.1 Purchased Assets. Subject to the terms and conditions of this Agreement, including the terms of Section 2.2, Pfizer shall, and shall cause the other Pfizer Parties to, transfer, convey, assign and deliver to NewCo, and NewCo shall acquire and accept from the Pfizer Parties, all of their respective right, title and interest in, to and under the following (collectively, the "Purchased Assets"), in each case free and clear of all Liens except Permitted Liens:

(a) Contracts. All Contracts set forth on Schedule 2.1(a) or otherwise used or held for use by Pfizer exclusively in connection with the Purchased Programs (collectively, the "Assigned Contracts");

(b) Inventory. The inventory of raw materials, works-in-progress and drug substance to the extent related exclusively to the Purchased Programs and owned by the Pfizer Parties as of the Closing Date, including, without limitation, the inventory set forth on Schedule 2.1(b) (collectively, the "Purchased Inventory");

(c) Intellectual Property. The Pfizer Assigned IP Rights;

(d) Books and Records. All books and records exclusively relating to the Purchased Assets, other than Consolidated Returns, and other than any books and records the disclosure of which would reasonably be expected to violate any Law or that relate solely to (i) personnel matters unrelated to Transferred Employees, (ii) any Excluded Asset, and (iii) any attorney work product, attorney-client communications, and other items that are protected by attorney-client privilege (the "Books and Records");

(e) Goodwill. All goodwill of the Pfizer Parties related to the Purchased Programs;

(f) Other Assets. The other assets of the Pfizer Parties identified on Schedule 2.1(f), which includes the Transferred Pfizer Know-How (the "Other Assets"); and

(g) Subsequently Assigned Assets. Non-Assignable Assets assigned pursuant to Section 2.5.

2.2 Excluded Assets. Notwithstanding any other provision of this Agreement, the Purchased Assets shall not include, and the Pfizer Parties and their Affiliates shall retain and shall not contribute, transfer, convey, assign or deliver to NewCo any of the following (collectively, the "Excluded Assets"):

(a) any assets of the Pfizer Parties that are not included within the definition of Purchased Assets;

(b) any Contracts or intercompany payables or receivables between and among Pfizer and its Subsidiaries;

(c) any cash, checks, money orders, marketable securities, short-term instruments and other cash equivalents, funds in time and demand deposits or similar accounts, and any evidence of indebtedness issued or guaranteed by any Governmental Authority;

(d) any Intellectual Property Rights (including retained rights under the Intellectual Property Rights owned by the Pfizer Parties and licensed to NewCo under the Patent and Know-How License Agreement) other than the Pfizer Assigned IP Rights;

(e) any Pfizer Benefit Plan and any assets related thereto;

(f) all Tax losses and credits, Tax loss and credit carry forwards and other Tax attributes, all deposits or advance payments with respect to Taxes, and any claims, rights, and interest in and to any refund, credit or reduction of Taxes, in each case relating to Excluded Taxes (regardless of when received);

(g) all rights, claims or causes of action of a Pfizer Party against Third Parties to the extent relating to any Excluded Asset or any Excluded Liability;

(h) Non-Assignable Assets, subject to Section 2.5;

(i) the assets, Contracts, equipment or other property listed on Schedule 2.2(i); and

(j) all income Tax Returns and records and other Tax Returns to the extent not exclusively related to the Purchased Programs or Purchased Assets.

For the purposes of Section 2.1 and Section 2.2, the terms Purchased Assets and Excluded Assets, as applicable, shall not include any Tax assets.

2.3 Assumed Liabilities. NewCo shall assume, satisfy and thereafter discharge the following Liabilities of Pfizer or its Affiliates, as applicable (the "Assumed Liabilities"):

(a) all Liabilities under the Assigned Contracts arising after the Closing, and including all unfulfilled binding commitments made prior to the Closing Date to purchase inventory that are scheduled to be delivered or provided thereafter;

(b) all other Liabilities arising from or relating to the Purchased Assets or the conduct of the Purchased Programs after the Closing, including all Liabilities under, and obligations to comply with, applicable Laws; *provided that* Assumed Liabilities shall not include any Liability for Excluded Taxes;

(c) all Liabilities arising from or relating to the practice by NewCo, its Affiliates or Sublicensees of any Intellectual Property Rights owned by the Pfizer Parties and licensed to NewCo under the Patent and Know-How License Agreement;

(d) all Liabilities arising from or relating to the employment or termination of employment of any Prospective Employee on or after the Closing Date (except as provided in Section 2.4(c)(ii));

(e) all Liabilities arising from any lawsuits commenced and claims made after the Closing to the extent resulting from the conduct of the Purchased Programs or the ownership of, or license to, the Purchased Assets after the Closing, including lawsuits and claims arising from the developing, manufacturing, commercializing, distributing, promoting, packaging, importing, marketing, selling or otherwise exploiting any Product after the Closing, including any post-Closing product liability claims, warranty obligations and intellectual property infringement or misappropriation and irrespective of the legal theory asserted;

(f) all Liabilities, including but not limited to any obligation to provide any notices, payments or any other benefits due to any Transferred Employees, if any, and any notices due to any Governmental Authority, if any, which may be required as a result of any "employment loss" (as defined under the Worker Notification Law), in each case, caused by NewCo's actions that occur on or after the Closing Date;

(g) all Liabilities arising after the Closing under the Non-Assignable Assets to the extent NewCo receives the benefits of such Non-Assignable Asset; and

(h) all Liabilities set forth in Schedule 2.3(h).

2.4 Excluded Liabilities. Pfizer and its Affiliates shall retain, and shall be responsible for paying, performing and discharging when due, and NewCo shall not assume or have any responsibility for, any Liabilities of Pfizer and its Affiliates other than the Assumed Liabilities and except as set forth in Section 12.2(d), including the following Liabilities (collectively, the "Excluded Liabilities"):

(a) all Liabilities arising from the Excluded Assets;

(b) all Liabilities under the Assigned Contracts arising prior to the Closing, including all outstanding accounts payable under the Assigned Contracts arising prior to the Closing;

(c) all Liabilities arising from or relating to any (i) Pfizer Benefit Plan or the employment, or termination of employment, of any employee of a Pfizer Party including any Prospective Employee or Transferred Employee, in each case arising prior to the Closing Date or (ii) termination of employment of any Prospective Employee that does not accept an offer of employment from NewCo;

(d) all Liabilities in respect of Excluded Taxes;

(e) all Liabilities arising from or relating to the use of Group 2 Pfizer IP Rights licensed to Pfizer by Pfizer or its sublicensees pursuant to the Patent and Know How License Agreement;

(f) all Liabilities arising from any lawsuits commenced and claims made prior to or after the Closing to the extent resulting from the conduct of the Purchased Programs or the ownership of, or license to, the Purchased Assets prior to the Closing; and

(g) all Liabilities set forth on Schedule 2.4(g).

2.5 Non-Assignable Assets.

(a) Notwithstanding the foregoing, and without limiting Section 11.1, if any Contract that would be an Assigned Contract, or other asset that would be a Purchased Asset, including the portion of any Shared Contract which is applicable to the Purchased Programs pursuant to Section 2.6, is not assignable or transferable (each, a "Non-Assignable Asset") without the consent of, or waiver by, a Third Party or action by a Governmental Authority (each, an "Assignment Consent"), either as a result of the

provisions thereof or applicable Laws, and any such Assignment Consent is not obtained on or prior to the Closing Date, then this Agreement and the related instruments of transfer shall not constitute an assignment or transfer of such Non-Assignable Asset and such Non-Assignable Asset shall not be included in the Purchased Assets. Without limiting the Pfizer Parties' obligations under Section 8.4 or Section 9.1, each of the parties hereto, for a period of [***] following the Closing Date, or longer to the extent provided for or contemplated by the Transition Services Agreement (the "Cooperation Period"), shall use commercially reasonable efforts to obtain all such Assignment Consents; *provided*, *however*, that nothing in this Section 2.5(a) shall require any of the Pfizer Parties or any of their Affiliates to modify any of its respective rights in a manner adverse to any of the Pfizer Parties or any of their Affiliates or to pay any fee or other payment, or incur any Liability, cost or out-of-pocket expense in connection with the efforts set forth in this Section 2.5(a), with any such Liabilities, costs or out-of-pocket expenses to be borne by NewCo. To the extent such Assignment Consents are obtained during the Cooperation Period, the Pfizer Parties shall assign to NewCo or its designee such Non-Assignable Assets. Following any such assignment, such assets shall be deemed Purchased Assets for purposes of this Agreement.

(b) During the Cooperation Period, the Pfizer Parties shall cooperate with NewCo in any commercially reasonable arrangement reasonably designed to provide NewCo or its designee with the net benefits of the Non-Assignable Assets after the Closing as if the appropriate Assignment Consents had been obtained, including by granting rights and establishing arrangements whereby NewCo or its designee shall undertake the work necessary to perform under Assigned Contracts, *provided, however*, that none of the Pfizer Parties shall be required to (i) undertake any work that would constitute a breach of the Assigned Contracts, (ii) modify any of its respective rights in a manner adverse to the Pfizer Parties or (iii) incur any Liability, cost or out-of-pocket expense in connection therewith; *provided further*, that such benefits shall be calculated net of documented out-of-pocket additional costs in connection therewith (including Taxes). To the extent the benefits of a

Non-Assignable Asset are made available to NewCo during the Cooperation Period, NewCo shall perform, at the direction of the applicable Pfizer Party, the obligations of such Pfizer Party under such Non-Assignable Asset and assume all Liabilities related thereto, and economically bear any out-of-pocket additional costs in connection with such Non-Assignable Asset (including Taxes). After the Cooperation Period, the Pfizer Parties shall continue to be subject to the obligations set forth in Section 9.2.

2.6 Shared Contracts. Each Pfizer Party shall use reasonable best efforts prior to the Closing to cooperate with NewCo in NewCo's efforts to enter into a new Contract related to the Purchased Programs with the counterparty to each Shared Contract on substantially the same terms and conditions as exist under such Shared Contract, in each case as of the Closing; provided, however, that nothing in this Section 2.6 shall require any of the Pfizer Parties or any of their Affiliates to modify any of its respective rights in a manner adverse to any of the Pfizer Parties or any of their Affiliates or to pay any fee or other payment, or incur any Liability, cost or out-of-pocket expense, in connection with the efforts set forth in this Section 2.6, with any such Liabilities, costs or out-of-pocket expenses to be borne by NewCo. The Pfizer Parties shall keep NewCo reasonably informed and shall consult with NewCo in good faith in connection with any

material actions taken with respect to any Shared Contract in furtherance of this Section 2.6 prior to Closing. Any Shared Contract for which the replacement Contract described in this Section 2.6 could not be entered into prior to the Closing shall be a Non-Assignable Asset subject to Section 2.5(b).

ARTICLE 3

CONSIDERATION FOR TRANSFER

3.1 Consideration. As consideration for the Pfizer Parties' sale to NewCo of the Purchased Assets, NewCo shall (a) issue to Pfizer 3,187,772 shares of Series A-1 Preferred Stock (the "Equity Consideration"); (b) assume at the Closing and subsequently, in due course in accordance with the terms applicable thereto, timely pay, perform and discharge the Assumed Liabilities and (c) subject to ARTICLE 14, make such payments as are required pursuant to ARTICLE 5 if, as and when due and payable thereunder (collectively, the "Consideration").

3.2 Withholding Taxes. NewCo (and its agents), the Pfizer Parties (and their agents), and any other applicable withholding agent shall be entitled to deduct and withhold from any consideration payable or otherwise deliverable pursuant to this Agreement such amounts as may be required to be deducted or withheld therefrom under any provision of federal, state, local or foreign Tax law or under any applicable Law and to request any necessary Tax forms, including Form W-9 or the appropriate series of Form W-8, as applicable, or any similar information. Prior to withholding any amount, the applicable withholding agent shall provide written notice to the Person to whom such amounts would otherwise have been paid, together with reasonably sufficient details regarding the nature of the relevant withholding Tax.If any reduction of or exemption from such Tax is available, the withholding agent shall cooperate with the Person to whom such amounts would otherwise have been paid to the extent commercially reasonable to obtain any such reduction or exemption.To the extent such amounts are so deducted or withheld and properly remitted to the appropriate Governmental Authority, such amounts shall be treated for all purposes under this Agreement as having been paid to the Person to whom such amounts would otherwise have been paid.

ARTICLE 4

CLOSING AND CLOSING DELIVERIES

4.1 Closing; Time and Place. The closing of the Transactions (the "Closing") shall occur at the offices of Ropes & Gray LLP, Prudential Tower, 800 Boylston Street, Boston, Massachusetts (or, if agreed by the parties, electronically through the exchange of documents), at 10:00 A.M. Eastern time on the date that is two (2) Business Days after the day on which all of the conditions to closing set forth in ARTICLE 11 are satisfied or waived (other than conditions that are intended to be satisfied at the Closing but subject to the satisfaction or waiver of such conditions), which is expected to be on or about April 6, 2018 or at such other date, time or place as the parties may agree (the "Closing Date").

4.2 Deliveries by Pfizer Parties. At the Closing, Pfizer shall, or shall cause the Pfizer Subsidiaries to, deliver, each of the following items, duly executed and delivered by the applicable Pfizer Party or Pfizer Parties:

(a) Contribution, Assignment and Assumption and Bill of Sale. A Contribution, Assignment and Assumption and Bill of Sale covering all of the applicable Purchased Assets and Assumed Liabilities, substantially in the form attached hereto as Exhibit B (the "General Assignment and Bill of Sale");

(b) Intellectual Property Assignments. A patent assignment (the "Patent Assignment") substantially in the form attached hereto as Exhibit C, for all of the Patents included in the Pfizer Assigned IP Rights;

(c) Patent and Know-How License Agreement. A patent and know-how license agreement, substantially in the form attached hereto as Exhibit D, pursuant to which, in part, (i) the Pfizer Parties will grant certain non-exclusive and exclusive licenses to NewCo under the Group 3 Pfizer IP Rights and certain other Intellectual Property Rights of Pfizer, and (ii) NewCo will grant certain non-exclusive and exclusive licenses to the Pfizer Parties under certain of the Intellectual Property Rights of NewCo (the "Patent and Know-How License Agreement");

(d) Transition Services Agreement. A transition services agreement, substantially in the form attached hereto as Exhibit E (the "Transition Services Agreement"), obligating the Pfizer Parties and certain of their Affiliates to provide certain transition services to NewCo and certain of its Affiliates for the period following the Closing set forth therein;

(e) Investors' Rights Agreement. A shareholder rights agreement among Pfizer, NewCo and the Other Investors, substantially in the form attached hereto as Exhibit F (the "Investors' Rights Agreement");

(f) Preferred Stock Purchase Agreement. A preferred stock purchase agreement among Pfizer, NewCo, the Other Investors, and the Founders substantially in the form attached hereto as Exhibit H-1, provided that if Gilead Sciences, Inc. or its Affiliate enters into an Equity Commitment Letter with respect to a funding commitment of [***] prior to Closing, such preferred stock purchase agreement shall be in the form attached hereto as Exhibit H-2 (in either case, the "Preferred Stock Purchase Agreement");

(g) Right of First Refusal and Co-Sale Agreement. A right of first refusal and co-sale agreement among Pfizer, NewCo, the Other Investors and the Founders, substantially in the form attached hereto as Exhibit I (the "Right of First Refusal and Co-Sale Agreement").

(h) Voting Agreement. A voting agreement among Pfizer, NewCo, the Other Investors and the Founders, substantially in the form attached hereto as Exhibit J (the "Voting Agreement").

(i) Books and Records. The Books and Records;

(j) FIRPTA Documentation. From each of Pfizer and Rinat Neuroscience Corp., a duly executed certificate of non-foreign status, dated as of the Closing Date, in form and substance reasonably satisfactory to NewCo, and conforming to the

requirements of Treasury Regulations Section 1.1445-2(b)(2), stating that each of Pfizer and Rinat Neuroscience Corp. is not a "foreign person" as defined in Section 1445 of the Code;

(k) Form W-9.From each of Pfizer and Rinat Neuroscience Corp., an original, properly completed and duly executed IRS Form W-9 (Rev. November 2017) executed on behalf of Pfizer and Rinat Neuroscience Corp., as applicable, by a duly authorized representative; and

(l) Certificate of Representations and Warranties. A certificate executed on behalf of Pfizer by an officer of Pfizer, certifying as to the matters in Section 11.1(a).

4.3 Deliveries by NewCo. At the Closing, NewCo shall deliver the following items, duly executed by NewCo as applicable:

(a) Consideration. The Equity Consideration;

(b) General Assignment and Bill of Sale. The General Assignment and Bill of Sale;

(c) Patent Assignment. The Patent Assignment;

(d) Patent and Know-How License Agreement. The Patent and Know-How License Agreement;

(e) Transition Services Agreement. The Transition Services Agreement;

(f) Investors' Rights Agreement. The Investors' Rights Agreement;

(g) Preferred Stock Purchase Agreement. The Preferred Stock Purchase Agreement;

(h) Right of First Refusal and Co-Sale Agreement. The Right of First Refusal and Co-Sale Agreement;

(i) Voting Agreement. The Voting Agreement; and

(j) Certificate of Representations and Warranties. A certificate executed on behalf of NewCo by an officer of NewCo, certifying as to the matters in Section 11.2(a).

ARTICLE 5

MILESTONES, ROYALTIES AND OTHER FINANCIAL OBLIGATIONS

5.1 Post-Closing Financial Obligations.

(a) Payments Upon Regulatory Approval. Subject to the remainder of this Section 5.1(a), on a Pfizer Target-by-Pfizer Target basis, NewCo will pay Pfizer the amounts set forth below within [***] days following the first occurrence of the event described in row (i), (ii), (iii) or (iv) of Table A, as applicable (such event, a "Milestone

Event") that is achieved by NewCo or any of its Affiliates or any Sublicensee (each amount, a "Milestone Payment").

Table A: Milestone Events and Payments

	Event	**Milestone Payment**
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

Each of the Milestone Payments set forth in Table A above will be payable only once for each applicable Pfizer Target (if at all), irrespective of how many Products Targeting such Pfizer Target achieve the applicable Milestone Event. For clarity, no payments are due hereunder for any CD52 Product.

(b) Sales Milestone Payments. On a Pfizer Target-by-Pfizer Target basis, other than for Early Stage Targets (i.e., for all Developed Pfizer Targets, the ROR1 Target and the CD19 Target), NewCo will pay Pfizer the following one-time payments (each, a "Sales Milestone Payment") when aggregate Territory Annual Net Sales of all Products Targeting such Pfizer Target (other than an Early Stage Target), in any Calendar Year during the Term (the "Total Annual Net Sales") first reach the respective thresholds indicated below for the [***] such Pfizer Targets for which such threshold is achieved:

Table B: Sales Milestone Payments

Total Annual Net Sales	**Sales Milestone Payment**
[***]	[***]
[***]	[***]
[***]	[***]
Total per Pfizer Target	**$325,000,000**

NewCo will make any Sales Milestone Payment payable with respect to a Calendar Year within [***] daysafter the end of the applicable Calendar Year, and such payment will be accompanied by a report identifying the applicable Pfizer Target and applicable Products, the Annual Net Sales of such Products, and the amount payable to Pfizer under this Section 5.1(b). Each of the Sales Milestone Payments set forth in Table B above will be payable one time only for each applicable Pfizer Target, regardless of the number of times the corresponding Total Annual Net Sales levels are achieved with respect to such Target. In the event more than one of the Total Annual Net Sales levels set forth in Table B above are achieved in the same Calendar Year, each applicable Sales Milestone Payment will become due and payable to Pfizer. For clarity, no sales based milestone payments will be payable with respect to any Products Targeting any Early Stage Target, or with respect to CD52 Products.

(c) Royalty Payments.

(i) Royalties for Products Targeting CD19 and ROR1 Targets. On a Product-by-Product and country-by-country basis, NewCo will pay Pfizer royalties equal to [***] percent ([***]%) of Annual Net Sales of Products Targeting the CD19 Target or the ROR1 Target during the applicable Royalty Term for each such Product in such country, subject to adjustment as provided under Section 5.1(c)(iv).

(ii) Royalties for Royalty-Bearing Products. On a Royalty-Bearing Product-by-Royalty-Bearing Product and country-by-country basis, NewCo will pay Pfizer royalties for each Royalty-Bearing Product (other than Products Targeting the CD19 Target and the ROR1 Target, which are addressed under subsection (i) above), on a tiered marginal royalty rate basis as set forth below (the "Marginal Royalty Rates") based on the annual aggregate Royalty Territory-wide Net Sales of such Royalty-Bearing Product during each Calendar Year of the applicable Royalty Term for each such Royalty-Bearing Product in such country (each, the "Annual Net Sales"), subject to adjustment as provided under Section 5.1(c)(iv):

Table C: Marginal Royalty Rates

Annual Net Sales of a Royalty-Bearing Product	**Marginal Royalty Rate (% of Annual Net Sales)**
Annual Net Sales above $[***], up to $[***] million	[***]%
Annual Net Sales including and above $[***], up to $[***]	[***]%
Annual Net Sales including and above $[***]	[***]%

Each Marginal Royalty Rate set forth in Table C above will apply only to that portion of the Net Sales of such Royalty-Bearing Product in the Territory during a given Calendar Year that falls within the indicated range.

(iii) Royalties for Other Royalty-Bearing Products. On an Other Royalty-Bearing Product-by-Other Royalty-Bearing Product and country-by-country basis, NewCo will pay Pfizer royalties equal to [***] percent ([***]%) of Net Sales of Other Royalty-Bearing Products during the applicable Royalty Term for each such Other Royalty-Bearing Product in such country in the Territory.

(iv) Adjustments.

(A) Third Party Intellectual Property. Except with respect to any amounts payable by NewCo under Section 2.6 of the Patent and Know-How

License Agreement or any amounts payable to Ablexis, LLC, Aliva Biopharmaceuticals, Inc. or any Affiliate thereof pursuant to the Ablexis Agreement or any new agreement entered into with respect to the Ablexis Antibodies, NewCo shall have the right to offset up to [***] percent ([***]%) of the royalty payments actually paid to a Third Party by NewCo, its Affiliates, or its Sublicensees on the sales of a Royalty-Bearing Product in a country in the Royalty Territory with respect to any license to intellectual property owned or controlled by such Third Party that is necessary or useful for development, manufacture, use or sale of such Royalty-Bearing Product in such country in the Royalty Territory against royalties otherwise payable by NewCo to Pfizer under subsection (i) or (ii) above for such Royalty-Bearing Product in such country; provided, however, that the maximum reduction under this subsection (A) in the amount of royalties otherwise payable hereunder for such Royalty-Bearing Product shall be capped at

(B) [***] percent ([***]%), subject to subsection (B) below. If, but for the proviso in the preceding sentence, the calculation of any deduction hereunder would have the effect of reducing a royalty payment made by NewCo by more than [***] percent ([***]%), then such deduction amount in excess of [***] percent ([***]%) will be applied to one or more subsequent royalty payments until the full amount that NewCo would have been entitled to deduct with respect to such deduction (absent the foregoing limitation) is deducted. Prior to applying any offset under this Section 5.1(c)(iv)(A), NewCo shall inform Pfizer in advance that amounts paid to a Third Party will be so offset against royalties owed to Pfizer in consideration for a license to intellectual property owned or controlled by such Third Party for the development, manufacture, use or sale of the applicable Royalty-Bearing Product in the applicable country.

(C) Non-Exclusive Group 3 Patents, Non-Exclusive Know-How Patents, Non-Exclusive Group 3 Know-How.If a Royalty-Bearing Product is (1) not Covered by a Valid Claim of any Assigned Patent, Key Assigned Contract Patent, Exclusive Group 3 Patent, Exclusive Know-How Patent or an Arising Patent that is an Arising Patent under clause (b) of the "Arising Patent" definition in Section 1.1 (with respect to an Assigned Patent or Exclusive Group 3 Patent) and (2) does not incorporate and is not made, discovered, developed or derived from the use of Exclusive Group 3 Know-How, or any Know-How included in the Pfizer Assigned IP Rights, then, notwithstanding Section 5.1(c)(ii), the royalty rate payable by NewCo for such Product under this Agreement shall be, on a country-by-country basis, equal to [***] percent ([***]%) of Net Sales of such Royalty-Bearing Product during the applicable Royalty Term in such country.

(D) Floor. The royalty rates set forth in Sections 5.1(c)(i) and (ii) may not be reduced for a given country in the Royalty Territory by application of the adjustments set forth in Section 5.1(c)(iv)(A) in the aggregate to less than the greater of (1) [***] percent ([***]%) of Net Sales and (2) [***] percent ([***]%) of the applicable royalty rate of Net Sales set forth in Sections 5.1(c)(i) or (ii).

(v) Third Party Payment Obligations. NewCo will be solely responsible for all obligations (including any milestone, royalty or other obligations that relate to the Products) under the Assigned Contracts arising as of or after the Closing Date and NewCo's other existing or future agreements with Third Parties.For the avoidance of doubt, no such obligations under the Assigned Contracts may be offset pursuant to Section 5.1(c)(iv)against royalties or any other payments owed to Pfizer under this Agreement.

(d) Reports and Payments.

(i) Royalty Statements and Payments. Within [***] days of the end of each Calendar Quarter, NewCo will deliver to Pfizer a report setting forth, for such Calendar Quarter, the following information, on a Product-by-Product, Target-by-Target, country-

by-country and Territory-wide basis: (A) Net Sales of each Product for each Target, (B) the type of permitted deductions from

(ii) gross sales to determine Net Sales and the total amount of such deductions; (C) the calculation of the royalties due to Pfizer for such Calendar Quarter, and (D) the royalty due hereunder for the sale of each such Product. NewCo will remit to Pfizer the total royalty due for the sale of all Products during the applicable Calendar Quarter at the time each such report is delivered.

(iii) Currency. As applicable, Net Sales that are recorded in local currencies other than United States dollars will be translated into United States dollars in a manner consistent with NewCo's normal practices used to prepare its audited financial statements for external reporting purposes, provided that such practices use a widely accepted source of published exchange rates.

(iv) Blocked Currency. If by applicable Law in a country or region, conversion into United States dollars or transfer of funds of a convertible currency to the United States becomes restricted, forbidden or substantially delayed, then NewCo shall promptly notify Pfizer and, thereafter, amounts accrued in such country or region shall be paid to Pfizer (or its designee) in such country or region in local currency by deposit in a local bank designated by Pfizer and to the credit of Pfizer.

(v) Method of Payment. Each payment hereunder will be made by electronic transfer in immediately available funds via either a bank wire transfer, an ACH (automated clearing house) mechanism, or any other means of electronic funds transfer, at Pfizer's election, to such bank account as Pfizer will designate in writing to NewCo at least [***] days before the payment is due.

(vi) Late Payments. Interest on any late payment by NewCo shall accrue from the date such payment was originally due at a rate equal to [***] percent ([***]%) above the prime rate of interest as reported in the Wall Street Journal on the date payment was due. Such interest shall be computed on the basis of a year of 360 days for the actual number of days payment is delinquent.

(vii) Record Keeping. NewCo will keep and will cause its Affiliates, licensees and Sublicensees to keep, books and accounts of record in connection with the sale of Products in sufficient detail to permit accurate determination of all figures necessary for verification of royalties and Sales Milestone Payments to be paid hereunder. NewCo and its Affiliates will maintain such records for a period of at least [***] years after the end of the Calendar Quarter in which they were generated, or such longer period as is required by applicable Law.

(viii) Audits. Upon [***] days prior notice from Pfizer, NewCo will permit, and will cause its Affiliates and Sublicensees to permit, an independent certified public accounting firm of nationally recognized standing selected by Pfizer and reasonably acceptable to NewCo, to examine, at Pfizer's sole expense, the relevant books and records of NewCo, its Affiliates and Sublicensees who are Sellers for the sole purpose of verifying the amounts reported by NewCo in accordance with Section 5.1 and the payment of royalties and Sales Milestone

(ix) Payments hereunder. An audit by Pfizer under this Section 5.1(d)(viii) will occur not more than once in any Calendar Year and will be limited to the pertinent books and records for any Calendar Year ending not more than [***] years before the date of the request. The accounting firm will be provided access to such books and records at the facility(ies) of NewCo, its Affiliates or Sublicensees, as applicable, where such books and records are normally kept and such examination will be conducted during normal business hours. NewCo or the applicable Sublicensee may require the accounting firm to sign a reasonably acceptable non-disclosure agreement before providing the accounting firm with access to facilities or records. Upon completion of the audit, the accounting firm will provide both Pfizer and NewCo a written report disclosing any discrepancies in the reports submitted by NewCo or the royalties or Sales Milestone Payments paid by NewCo, and, in each case, the specific details concerning any discrepancies. Such accounting firm shall not disclose NewCo's Confidential Information to Pfizer, except to the extent such disclosure is necessary to verify the accuracy of the reports furnished by NewCo in accordance with Section

5.1 or the amount of payments by NewCo under this Agreement, in which case Pfizer's obligations with respect to such Confidential Information shall be subject to Section 9.6.

(x) Underpayments/Overpayments. If such accounting firm concludes that additional royalties or Sales Milestone Payments were due to Pfizer, then NewCo will pay to Pfizer the additional royalties or Sales Milestone Payments within [***] days of the date NewCo receives such accountant's written report. Further, if the amount of such underpayments exceeds more than [***percent ([***]%) of the amount that was properly payable to Pfizer, then NewCo will reimburse Pfizer for Pfizer's reasonable documented out-of-pocket costs in connection with the audit. If such accounting firm concludes that NewCo overpaid royalties or Sales Milestone Payments to Pfizer, then such overpayments will be credited against future amounts payable by NewCo to Pfizer under this Section 5.1, or, if no further payments are to be made to Pfizer under this Agreement, Pfizer shall promptly repay such overpayment.

(xi) Confidentiality. Notwithstanding any provision of this Agreement to the contrary all reports and financial information of NewCo or its Affiliates' Sublicensees which are provided to or subject to review by Pfizer under this Section 5.1 will be deemed to be NewCo's Confidential Information and subject to the provisions of Section 9.6.

5.2 Diligence and Post-Closing Obligations.

(a) Generally. Subject to Section 5.2(b) below, NewCo will have sole authority over and control of the development, manufacture, seeking and obtaining Regulatory Approval and commercialization of Products in the Territory and will retain final decision-making authority with respect thereto.

(b) Diligence.

(i) Development and Regulatory Approval. NewCo shall use Commercially Reasonable Efforts to develop, and to file for and seek to obtain Regulatory Approval for Royalty-Bearing Products in and for the United States and for Royalty-Bearing Products other than the Servier Products, the European Union (including for such purpose, the United Kingdom), which such obligation shall remain in effect until the tenth anniversary of the Closing Date.

(ii) Commercialization. On a Product-by-Product and country-by-country basis, NewCo will use Commercially Reasonable Efforts to commercialize each Product in each country in the applicable Royalty Territory in which Regulatory Approval for such Product has been obtained.

(iii) Compliance with Law and Procedures. NewCo will perform all development, Regulatory Approval and commercialization activities relating to Products in compliance with all applicable Laws.

(iv) Diligence Reports.

(A) NewCo shall deliver to Pfizer a written report summarizing material development and Regulatory Approval activities undertaken by or on behalf of NewCo with respect to the Products and Purchased Programs and a reasonably detailed summary of all results and data stemming from such development activities (each, a "Development Update"). NewCo shall deliver such Development Updates (x) within [***] days of the end of each Calendar Quarter during the period from the Closing Date until [***] anniversary of the Closing Date; and (y) every [***] thereafter until Regulatory Approval of the first Product, and (z) [***], thereafter, until [***] anniversary of such initial Regulatory Approval.

(B) Beginning on or before January 1 of the Calendar Year following the Calendar Year in which Regulatory Approval of the first Product is received, NewCo shall provide written reports to Pfizer on an annual basis, summarizing material commercial activities undertaken by or on behalf of NewCo with respect to such Product and any other Products.

(C) Upon at least [***] days' notice from Pfizer, NewCo shall arrange for representatives of NewCo to meet in person with Pfizer, no more than [***] per twelve (12) month period and following delivery of any of the above reports, to discuss the contents of such report and any prior report.

ARTICLE 6

REPRESENTATIONS AND WARRANTIES OF PFIZER

Subject to the terms of this Agreement and except as set forth in the corresponding sections or subsections of the disclosure schedules attached hereto, Pfizer represents and warrants to NewCo as of the date of this Agreement as follows:

6.1 Organization. Pfizer is a corporation duly incorporated, validly existing and in good standing under the Laws of the State of Delaware. Each of the other Pfizer Parties is a legal entity duly organized, validly existing and in good standing (where such concept is recognized under applicable Law) under the Laws of its respective jurisdiction of organization. Each Pfizer Party is duly qualified or licensed, and has, or has a license to, all Governmental Approvals necessary, to do business and is in good standing (where such concept is recognized under applicable Law) and authorized to do business under the Laws in each jurisdiction in which the property owned, leased or operated by it or the nature of the business conducted by it makes such approvals, qualification or licensing necessary, except where the failure to be so qualified or licensed or to have such power, authority or approvals or be in good standing has not had, and would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

6.2 Power and Authority Relative to this Agreement.

(a) Each Pfizer Party has the requisite corporate or limited liability company power and authority to carry out the provisions of this Agreement and/or the other Transaction Agreements, as applicable. The execution, delivery and performance of this Agreement and the other Transaction Agreements, as applicable, by each Pfizer Party and the consummation of the Transactions have been duly and validly authorized by each Pfizer Party's board of directors (or similar governing body).

(b) This Agreement has been duly and validly executed and delivered by Pfizer and is enforceable against Pfizer in accordance with its terms, except as such enforcement may be subject to applicable bankruptcy, reorganization, insolvency, moratorium or other similar Laws affecting creditors' rights generally and the availability of equitable relief (the "Enforceability Exceptions").

(c) As of the Closing, each of the other Transaction Agreements to which a Pfizer Party is a party will have been duly and validly executed and delivered by such applicable Pfizer Party and will be enforceable against such Pfizer Party in accordance with its terms, subject to the Enforceability Exceptions.

6.3 Consents; No Violation.

(a) Other than as set forth on Schedule 6.3, no authorization, consent, Order, license, permit or approval of, or registration, declaration, notice or filing with, any Governmental Authority is necessary, under applicable Law, for the consummation by the Pfizer Parties of the Transactions other than such authorizations, consents, Orders, licenses, permits, approvals, registrations, declarations, notices and filings (i) as have already been obtained or (ii) the failure of which to be obtained would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.

(b) The execution and delivery by the Pfizer Parties of this Agreement and the other Transaction Agreements, as applicable, does not, and the consummation of the Transactions and compliance with the provisions hereof will not, (i) result in any violation of, or default (with or without notice or lapse of time, or both) under, or give rise to a right of termination, cancellation, first offer, first refusal, modification or acceleration of any obligation or to the loss of a benefit under any Key Assigned Contract or other Assigned Contract binding upon any Pfizer Party by which or to which any of the Purchased Assets are bound or subject, or result in the creation of Liens, other than Permitted Liens, in each case, upon any of the Purchased Assets or the conduct of the Purchased Programs, (ii) conflict with or result in any violation of any provision of the respective Organizational Documents of any Pfizer Party or (iii) violate any applicable Laws to which any Pfizer Party is subject, except as, with respect to clause (i) or (iii), would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

6.4 Permits. Schedule 6.4 describes (a) each material Permit held by a Pfizer Party in connection with such Pfizer Party's operation of the Purchased Programs (the "Purchased Programs Permits"), and (b) the Governmental Authority responsible for issuing such Purchased Programs Permit. All Purchased Programs Permits are valid and in full force and effect, and are not subject to any administrative or judicial Proceeding that would reasonably be expected to result in any modification, termination or revocation thereof and, to the knowledge of the Pfizer Parties, no suspension or cancellation of any such Purchased Programs Permit is threatened by a Governmental Authority in writing. The Pfizer Parties are in compliance in all material respects with the terms and requirements of all Purchased Programs Permits.

6.5 Compliance with Laws.

(a) The Pfizer Parties are in compliance in all material respects with all Laws, including Regulatory Laws, and Governmental Approvals applicable to the conduct of the Purchased Programs as conducted as of the date of this Agreement, including the nonclinical and clinical testing, manufacture, storage, distribution, marketing, pricing, packaging, labeling and sale of the Products in the United States, as applicable. All such Governmental Approvals are valid and in full force and effect without any contingency, restriction or limitation other than which would immaterially impair the conduct of the Purchased Programs.

(b) The Pfizer Parties are in compliance in all material respects with all Orders of any Governmental Authority to which they are subject, including any corporate integrity agreement, including all programmatic, operational and reporting requirements,

---

in each case, applicable to the Purchased Programs, the Purchased Assets or the Assumed Liabilities.

(c) Since January 1, 2016, neither the Pfizer Parties nor, to the knowledge of the Pfizer Parties, any employee or contractor of the Pfizer Parties, has made any voluntary or self-disclosure to any Governmental Authority regarding any potential non-compliance in any material respect with any Governmental Approval, Orders of any Governmental Authority, or Law, in each case applicable to the Purchased Programs, the Purchased Assets or the Assumed Liabilities.

(d) Neither Pfizer nor any of its Affiliates, nor any of its or their respective officers or employees (i) has made an untrue statement of material fact or fraudulent statement to the FDA or any other Governmental Authority responsible for enforcement or oversight with respect to healthcare Laws with respect to the development of any Product, (ii) has failed to disclose a material fact required to be disclosed to the FDA or any other Governmental Authority responsible for enforcement or oversight with respect to healthcare Laws with respect to the development of any Product, or (iii) committed an act, made a statement, or failed to make a statement with respect to the development of any Product that, at the time such disclosure was made, would reasonably be expected to provide a basis for the FDA to invoke its policy respecting "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities", set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto or any analogous laws or policies outside the United States.

(e) No Pfizer employee or, to Pfizer's knowledge, any agent who worked on the development or manufacture of any Product has committed any act, made any statement or failed to make any statement that would reasonably be expected to provide a basis for the FDA or any other Governmental Authority to invoke its policy with respect to "Fraud, Untrue Statements of Material Facts, Bribery,

and Illegal Gratuities" set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto. No Pfizer employee or, to Pfizer's knowledge, any agent who worked on the development or manufacture of any Product has been convicted of any crime or engaged in any conduct that would reasonably be expected to result, or has resulted, in (i) debarment under 21 U.S.C. Section 335a or any similar state Law, or (ii) exclusion under 42 U.S.C. Section 1320a-7 or any similar state Law.

6.6 Absence of Certain Changes. Since December 31, 2017, (a) no event has occurred or arisen that has had, or would reasonably be expected to have, a Material Adverse Effect, (b) the Purchased Programs have been conducted in the ordinary course of business in all material respects and (c) except as set forth on the disclosure schedules attached hereto, there has not been any:

(i) Sale, lease or other disposition of any Purchased Asset, other than in the ordinary course of business, or the creation of any Lien on any Purchased Asset, except for Permitted Liens;

(ii) Termination of any Key Assigned Contract;

(iii) Increase by the Pfizer Parties of the salaries, bonuses or other compensation to any Prospective Employee, other than in the ordinary course of business;

(iv) Adoption of, amendment to or increase in the payments to or benefits under any Covered Benefit Plan in which any of the Prospective Employees participates, other than in the ordinary course of business; or

(v) Contract by Pfizer to do any of the foregoing.

6.7 Tax Matters.

(a) Each Pfizer Party has prepared and timely filed (taking into account any valid extension of time within which to file) all income Tax Returns and all other material Tax Returns required to be filed by it in respect of the Purchased Programs, the Purchased Assets, and the Transferred Employees, and all such Tax Returns are true, complete and accurate in all material respects.No extension of time within which to file any such Tax Returns that has not been filed has been requested or granted, other than such extensions filed in the ordinary course of business.

(b) Each Pfizer Party has timely paid all material amounts of all Taxes due, payable and owing by it (whether or not shown on any Tax Return), except for such Taxes for which adequate reserves have been established, in respect of the Purchased Programs, the Purchased Assets, and the Transferred Employees.

(c) Each Pfizer Party has complied in all material aspects with all applicable Laws relating to the payment, collection, withholding and remittance of material amounts of all Taxes (including information reporting requirements in respect thereof) in respect of the Purchased Programs, the Purchased Assets, and the Transferred Employees, including with respect to payments made to or received from any employee, independent contractor, creditor, customer, stockholder or other Third Party.

(d) None of the Pfizer Parties has waived or extended any statute of limitations with respect to material amounts of Taxes or agreed to any extensions of time with respect to a Tax assessment or deficiency which waiver or extension is still in effect, in each case in respect of any Purchased Program, Purchased Asset, or Transferred Employee.

(e) No deficiencies or proposed assessments for material amounts of Taxes in respect of the Purchased Programs, the Purchased Assets, or the Transferred Employees have been claimed, proposed or assessed by any Governmental Authority in writing except for deficiencies which have been fully satisfied by payment, settled or withdrawn.

(f) There are no audits, suits, examinations, investigations or other Proceedings pending or threatened in writing in respect of material amounts of any Taxes or material Tax matters in respect of any of the Purchased Programs, the Purchased Assets, or the Transferred Employees.None of the Pfizer Parties has received a written ruling from any Tax Authority in respect of any Purchased Program, Purchased Asset, or

Transferred Employee.There are no Liens for Taxes on any of the Purchased Programs or Purchased Assets other than statutory liens for current Taxes not yet due and payable.

(g) None of the Pfizer Parties (i) is a party to any agreement or arrangement relating to the sharing, indemnification or allocation of any Tax or Tax asset (other than (A) an agreement or arrangement solely between or among Pfizer, and/or any other Affiliate of Pfizer and (B) any Tax sharing, indemnification or allocation provisions in agreements entered into in the ordinary course of business and not primarily relating to Taxes) or (ii) has any Liability for Taxes of any person (other than the Pfizer and/or any other Affiliate of Pfizer) under Treasury Regulations Section 1.1502-6 (or any analogous or similar provision of state, local or foreign Law), as transferee, successor, by contract, or otherwise.

(h) None of the Pfizer Parties has participated in any "listed transaction" within the meaning of Treasury Regulations Section 1.6011-4(b)(2) (or any analogous or similar provision of state, local or foreign Law).

(i) None of the Purchased Assets is a "United States real property interest" within the meaning of Section 897(c)(1) of the Code and the Treasury Regulations thereunder other than Purchased Assets that are owned and transferred by Pfizer Parties that are not "foreign persons" within the meaning of Section 1445 of the Code (and each such Pfizer Party has delivered a duly executed non-foreign affidavit in accordance with Section 4.2(j)).

(j) No claim has been made by a Tax Authority in writing in a jurisdiction where a Pfizer Party does not file Tax Returns in respect of any Purchased Program, Purchased Asset, or Transferred Employee, that such Pfizer Party is or may subject to taxation by that jurisdiction in respect of such Purchased Program, Purchased Asset, or Transferred Employee.

(k) Neither the execution of this Agreement nor the consummation of the transactions contemplated hereby, either alone or in conjunction with any other event (whether contingent or otherwise) will, with respect to any Prospective Employee, result in the payment of any "parachute payment" (within the meaning of Section 280G of the Code) that is subject to the imposition of an excise Tax under Section 4999 of the Code or that would not be deductible by reason of Section 280G of the Code.

Notwithstanding any other provision of this Agreement, (i) the representations and warranties contained in this Section 6.7 constitute the sole and exclusive representations and warranties of the Pfizer Parties in this ARTICLE 6 relating to any Taxes or Tax Returns and (ii) nothing in this Agreement shall be construed as providing a representation or warranty with respect to the existence, amount, expiration date or limitations on (or availability of) any Tax attribute (including methods of accounting) of the Pfizer Parties for taxable periods (or portions thereof) beginning after the Closing Date.

6.8 Prospective Employees; Employee Benefits.

(a) The Pfizer Parties have provided to NewCo an accurate and complete list as of the Effective Date of: (i) the job title, full or part-time status, business unit, base

compensation, target bonus percentage, fringe benefits, eligibility for equity, hire date, status as exempt or non-exempt (under applicable overtime regulations), and location of all current employees who NewCo will be obligated to offer employment to pursuant

to Article 10 (the "Prospective Employees"). As of the Effective Date, no Prospective Employee is on a leave of absence of any kind. As of the date hereof, no Prospective Employee has given notice to any of the Pfizer Parties of such employee's termination of employment or request for a leave of absence. To the knowledge of the Pfizer Parties, no Prospective Employee intends to terminate his or her employment with any of the Pfizer Parties or request or take a leave of absence prior to the Effective Date, or intends to terminate his or her employment with NewCo within six (6) months following the Effective Date.

(b) The Pfizer Parties are currently, and for the past three (3) years, have been, in material compliance with all applicable Laws respecting employment, discrimination in employment, terms and conditions of employment, wages, hours and occupational safety and health with respect to the Prospective Employees. There are no Proceedings pending or, to the knowledge of the Pfizer Parties, threatened, between any of the Pfizer Parties and any of the Prospective Employees before any Governmental Authority. To the knowledge of the Pfizer Parties, no Prospective Employee is in material violation of any (i) employment, non-disclosure, confidentiality or consulting agreement with any of the Pfizer Parties, or (ii) non-competition agreement, non-solicitation agreement, non-disclosure agreement or similar restrictive covenant with a former employer relating to the right of any such Person to be employed by or provide services to the Pfizer Parties because of the nature of the business conducted or presently proposed to be conducted by the Pfizer Parties.

(c) No Prospective Employee is represented by a labor union or other employee representative body, and, to the knowledge of the Pfizer Parties, there are no activities or proceedings filed by any labor union or other employee representative body as of the date hereof to organize any of the Prospective Employees.

(d) Schedule 6.8(d) contains an accurate and complete list of all Pfizer Benefit Plans (i)(A) under which any Prospective Employee or any beneficiary thereof participates and (B) where, pursuant to ARTICLE 10 hereof, NewCo is either agreeing to provide similar benefits under a NewCo benefit plan or assume any costs arising under any such Pfizer Benefit Plan; or (ii) under which NewCo or any of its Affiliates would reasonably be expected to have any material Liability (each such plan, a "Covered Benefit Plan"). With respect to each Covered Benefit Plan in which any Prospective Employee currently participates, the Pfizer Parties have made available to NewCo complete and accurate copies of the following: (i) in the case of any Covered Benefit Plan that is a severance plan (including the Pfizer Separation Plan), the plan document and all amendments thereto; (ii) in the case of any Covered Benefit Plan not identified in clause (i) a summary of the material terms thereof or a copy of the most recent summary plan description; and (iii) if applicable, the most recent determination or opinion letter received from the IRS. No Covered Benefit Plan is maintained, sponsored, contributed to, or required to be contributed to by the Pfizer Parties primarily for the benefit of employees outside of the United States.

(e) Each Covered Benefit Plan has been maintained, funded and administered in compliance with its own terms and in compliance in all material respects with the provisions of applicable Laws, including ERISA and the Code. No Covered Benefit Plan which is a defined benefit plan had, as of the most recent measurement date, an "adjusted funding target attainment percentage," as defined in Section 436 of the Code, that was less than 80%. No Covered Benefit Plan has an "accumulated funding deficiency," whether or not waived, or is subject to a lien for unpaid contributions under Section 303(k) of ERISA or Section 430(k) of the Code.

(f) Each Covered Benefit Plan that is intended to qualify under Section 401(a) of the Code is subject to a favorable determination or opinion letter from the IRS and, to the knowledge of the Pfizer Parties, no act or omission has occurred that would reasonably be expected to adversely affect the qualified status of any such Covered Benefit Plan.

(g) Other than as set forth on Schedule 6.8(g), no Prospective Employee participates in any Covered Benefit Plan that is: (i) a "multiemployer plan" within the meaning of Section 3(37) or Section 4001(a)(4) of ERISA; or (ii) a benefit plan that is subject to Title IV of ERISA or the funding requirements of Section 302 of ERISA or Section 412 of the Code.

(h) Other than as set forth on Schedule 6.8(h) or as provided in ARTICLE 10, neither the execution of this Agreement nor the consummation of the transactions contemplated hereby, either alone or in conjunction with any other event (whether contingent or otherwise) will, with respect to any Prospective Employee: (i) result in any payment or benefit becoming payable, or required to be provided, by any of the Pfizer Parties to any such individual (other than payment of earned and unpaid wages, accrued vacation or

paid time off in connection with the termination of any Transferred Employee by a Pfizer Party in connection with the Closing); (ii) result in the forgiveness of any indebtedness of any such individual; or (iii) increase the amount of any benefit or compensation otherwise payable or required to be provided, by any of the Pfizer Parties to any such individual; or (iv) result in the acceleration of the vesting or timing of payment of any compensation or benefits payable by any of the Pfizer Parties to or in respect of any such individual.

(i) Other than the Prospective Employees, there are no employees of any of the Pfizer Parties, and there are no employees of any of the Pfizer Parties who are employed outside of the United States, who are wholly or mainly assigned to the Purchased Programs or dedicate a material percentage of his or her services to the Purchased Programs.

(j) Notwithstanding any other provision of this Agreement, the representations and warranties contained in Section 6.6(c)(iv), Section 6.7, this Section 6.8, Section 6.9(k)-(l) and Section 6.13(e) constitute the sole and exclusive representations and warranties relating to employees and employee benefit plans.

6.9 Intellectual Property.

(a) With respect to the Pfizer Assigned IP Rights, Schedule 6.9 sets forth, in each case as of the date hereof, an accurate and complete list of all U.S. and foreign: (i) Patents including the patent number or application serial number for each jurisdiction in which the Patent has been filed, the date filed or issued; (ii) applications and registrations for Trademarks, including the application serial number or registration number, for each country, province and state; (iii) domain names; and (iv) registered Copyrights applications and registrations, including the number and date of registration for each country, province and state, in which a Copyright has been registered (clauses (i) through (iv), collectively the "Purchased Programs Registered Intellectual Property").

(b) No exclusive licenses of any Pfizer Assigned IP Rights, any Group 3 Pfizer IP Rights, or, to Pfizer's knowledge, no exclusive licenses of any Key Assigned Contract Patent, are granted by Pfizer Parties to Third Parties.

(c) The issued patents included in the Pfizer Assigned IP Rights and the Group 3 Pfizer IP Rights and to Pfizer's knowledge, in the Key Assigned Contract Patents, are in effect and subsisting.

(d) Immediately prior to the Closing Date, the Pfizer Parties will be (i) the sole and exclusive owner of the Pfizer Assigned IP Rights and the Group 3 Pfizer IP Rights, or (ii) the holder of a valid right or exclusive license to use the Pfizer Assigned IP Rights, which right or license may be assigned to NewCo hereunder without the consent of any Third Party or, if such consent is required, such consent will have been received prior to the Closing Date.

(e) The Pfizer Assigned IP Rights, the Group 3 Pfizer IP Rights and, to Pfizer's knowledge, the Key Assigned Contract Patents, are free and clear of any Liens, other than Permitted Liens.

(f) To Pfizer's knowledge, no person has infringed or is infringing any Pfizer Assigned IP Rights, Group 3 Pfizer IP Rights or Key Assigned Contract Patents, or has otherwise misappropriated or is otherwise misappropriating any Know-How within the Pfizer Assigned IP Rights or Group 3 Pfizer IP Rights.

(g) To Pfizer's knowledge, there are no claims pending or threatened by the Pfizer Parties against any Person, nor have the Pfizer Parties sent any written notice to any Person, regarding actual or potential infringement, dilution, misappropriation or other unauthorized use of any Pfizer Assigned IP Rights, Key Assigned Contract Patents or Group 3 Pfizer IP Rights.

(h) As of the Closing Date, to Pfizer's knowledge, (i) there are no adverse Third Party actions or claims pending against the Pfizer Parties by any Person in any court, arbitration or by or before any Governmental Authority or, to Pfizer's knowledge, any written adverse Third Party allegations, in any such case to the effect that the manufacture, use, promotion, marketing or sale of the Products

constitutes an infringement or misappropriation of the intellectual property rights of such Person, and (ii) none of the Pfizer Assigned IP Rights or Group 3 Pfizer IP Rights or any Key

Assigned Contract Patent is involved in any litigation or inventorship challenge, reissue, interference, reexamination, *inter partes* review, opposition, cancellation proceeding, or other post-grant proceeding.

(i) Each of the Patents within the Pfizer Assigned IP Rights, Key Assigned Contract Patents, and Group 3 Pfizer IP Rights properly identifies, to Pfizer's knowledge, each and every inventor of the claims thereof as determined in accordance with the law of the Territory in which such Patents with the Pfizer Assigned IP Rights, Key Assigned Contract Patents or Group 3 Pfizer IP Rights is issued or pending.

(j) To Pfizer's knowledge, all material prior art of which the Pfizer Parties were aware during the pendency of any application currently in substantive prosecution relating to any issued patent in the Pfizer Assigned IP Rights, Key Assigned Contract Patents or Group 3 Pfizer IP Rights owned by a Pfizer Party was properly filed with the patent authorities in the territory in which such application was pending. For all Pfizer Assigned IP Rights, Group 3 Pfizer IP Rights and, to Pfizer's knowledge, the Key Assigned Contract Patents, the Pfizer Parties have met their duty of candor as and if required under 37 C.F.R. 1.56 and complied with analogous Law outside the United States requiring disclosure of references.

(k) Each current and former employee and individual contractor of the Pfizer Parties who is or was involved, to Pfizer's knowledge, in the creation or development of any Pfizer Assigned IP Rights or Group 3 Pfizer IP Rights owned by a Pfizer Party has executed and delivered (and to the Pfizer Parties' knowledge, is in compliance with) an employment or consulting agreement containing nondisclosure, assignment, and non-solicitation provisions.

(l) To Pfizer's knowledge, none of the Prospective Employees is obligated under any agreement, commitment, judgment, decree or order that would materially conflict with the Purchased Programs as conducted. The Pfizer Parties are not using, and, to Pfizer's knowledge, it will not be necessary to use, in connection with the Purchased Programs (i) any inventions of any of their past or present employees or individual contractors made prior to or outside the scope of their employment or consulting agreement by the Pfizer Parties that have not been assigned, licensed or otherwise transferred to a Pfizer Party or (ii) any confidential information or trade secret of any former employer of any such employee or contractors that has not been assigned, licensed or otherwise transferred to a Pfizer Party.

6.10 Purchased Assets.

(a) The Pfizer Parties are the sole and exclusive owners of and have good and valid title to, or valid and subsisting leasehold interests in, all of the Purchased Assets constituting tangible personal property other than Permitted Liens. The Pfizer Parties have all requisite corporate power and authority to conduct and carry on the Purchased Programs as they are now being conducted.

(b) The Purchased Assets, the Intellectual Property Rights licensed pursuant to the Key Assigned Contracts and the Group 3 Pfizer IP Rights, together with any of the rights and licenses granted or provided to NewCo pursuant to the Patent and Know-How

License Agreement and the services to be provided under the Transition Services Agreement, as well as the transactions contemplated hereby and thereby, constitute in the aggregate all the assets necessary to conduct the Purchased Programs in substantially the same manner in all material respects as conducted as of the Effective Date.

6.11 Investigations; Litigation. Since January 1, 2016 (a) there have been no material Proceedings relating to potential breaches, misappropriations or other violations of Law pending, alleged or, to the knowledge of Pfizer, threatened with respect to any Pfizer Party and (b) there have been no material Orders of any Governmental Authority imposed upon any Pfizer Party, in each case with respect to the Purchased Programs or the Transactions.

6.12 Inventory. The Purchased Inventory consists of a quality and quantity usable in the ordinary course of business consistent with past practice except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect and (a) are not excessive in light of the normal operating requirements of the Purchased Programs and (b) are adequate for the conduct of the Purchased Programs in substantially the same manner in all material respects as conducted as of the Effective Date.

6.13 Assigned Contracts.

(a) The Pfizer Parties have made available to NewCo prior to the date of this Agreement a complete, legible and correct copy of each Assigned Contract as in effect on the date of this Agreement. None of the Pfizer Parties is in material breach of or default under the terms of any Assigned Contract and, to the knowledge of the Pfizer Parties, no other party to an Assigned Contract is in material breach of or default under the terms of any Assigned Contract, and there is no event occurring as a direct or reasonably foreseeable result of any Pfizer Party's action or inaction or, to the knowledge of any Pfizer Party, through the action or inaction of any Third Party that with notice or the lapse of time or both would constitute a material breach of or default under the terms of any Assigned Contract. Each Assigned Contract is a legal, valid and binding obligation of the Pfizer Party that is party thereto and, to the knowledge of the Pfizer Parties, of each other party thereto, and is in full force and effect, subject to the Enforceability Exceptions.

(b) Except as set forth in Schedule 6.13(b), no approval, consent or waiver of any Person is needed to continue any Assigned Contract in full force and effect following the consummation of the Transactions.

(c) None of the Pfizer Parties has received written notice from any Person since January 1, 2017 regarding any actual or alleged violation or breach of, or default under, any of the Assigned Contracts or stating that such Person intends to terminate, cancel or make any material change to any Assigned Contract, in each case that would be material to the conduct of the Purchased Programs taken as a whole. Other than as contemplated herein in connection with the Transactions, there are no pending renegotiations or amendments of any of the Assigned Contracts that would be material to the conduct of the Purchased Programs taken as a whole.

(d) The Purchased Programs as conducted by the Pfizer Parties as of the Effective Date do not rely upon or use rights under any Contract that has expired or been terminated that would be material to the Purchased Programs taken as a whole.

(e) The Pfizer Parties are not a party to, bound by or subject to any Contract exclusively relating to the Purchased Programs or the Purchased Assets that are material to the Purchased Programs taken as a whole, except for (i) the Assigned Contracts, (ii) any Contract for employment of Prospective Employees or Covered Benefit Plan, (iii) any Contract relating to the use or ownership of any real property and (iv) those Contracts described on Schedule 6.13(e).

6.14 Finders or Brokers. Other than Centerview Partners LLC, no Pfizer Party has retained any broker or finder or incurred any Liability for any brokerage fees, commissions or finders fees with respect to this Agreement or the Transactions.

6.15 Accredited Investor. For purposes of the issuance of the Equity Consideration at Closing, Pfizer represents that it is an "accredited investor" as such term is defined in Rule 501 under the Securities Act of 1933.

6.16 No Other Representations and Warranties. Except for the representations and warranties contained in this ARTICLE 6 (including the related portions of the disclosure schedules attached hereto), the General Assignment and Bill of Sale, the Patent Assignment and

Section 7 of the Patent and Know-How License Agreement, neither Pfizer nor any other Person has made or makes any other express or implied representation or warranty, either written or oral, on behalf of Pfizer, including any representation or warranty as to the accuracy or completeness of any information regarding the Purchased Programs and the Purchased Assets furnished or made available to NewCo and its Representatives or as to the future revenue, profitability or success of the Purchased Programs.

ARTICLE 7

REPRESENTATIONS AND WARRANTIES OF NEWCO

Subject to the terms of this Agreement and except as set forth in the corresponding sections or subsections of the disclosure schedules attached hereto, NewCo represents and warrants to Pfizer as of the date of this Agreement as follows:

7.1 Organization.

(a) NewCo is a corporation duly organized, validly existing and in good standing under the Laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as now conducted and as presently proposed to be conducted. Except as set forth on Schedule 7.1(a), NewCo is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify would have a material adverse effect on NewCo's ability to consummate the Transactions.

(b) NewCo has made available to Pfizer prior to the date of this Agreement a true and complete copy of its certificate of incorporation and bylaws that are currently in effect (together, the "Initial NewCo Organizational Documents"). Prior to the Closing, NewCo shall have filed the Restated Certificate with the Delaware Secretary of State and amended and restated its bylaws (the "Restated Bylaws") and at the Closing and immediately after the Closing, the Restated Certificate and the Restated Bylaws (together,

---

the "Post-Closing NewCo Organizational Documents") shall be in full force and effect and NewCo shall not be in violation of their provisions.

7.2 Capitalization.

(a) Immediately prior to the Closing, the authorized capital of NewCo shall consist, of:

(i) 20,000,000 shares of Common Stock, 5,000,000 shares of which are issued and outstanding immediately prior to the Closing. All of the outstanding shares of Common Stock have been duly authorized, are fully paid and non-assessable and were issued in compliance with all applicable federal and state securities laws. NewCo holds no Common Stock in its treasury.

(ii) 11,743,987 shares of Class A Preferred Stock, par value $0.001, of which: (A) 7,557,990 shares have been designated Series A Preferred Stock; and (B) 4,185,997 shares have been designated Series A-1 Preferred Stock, noneof which shall be issued and outstanding immediately prior to the Closing. The rights, privileges and preferences of the Equity Consideration are as stated in the Restated Certificate and as provided by the Delaware General Corporation Law. NewCo holds no Preferred Stock in its treasury.

(b) NewCo has reserved 1,000,000 shares of Common Stock for issuance to officers, directors, employees and consultants of NewCo pursuant to its 2017 Equity Incentive Plan duly adopted by NewCo's board of directors and approved by NewCo's stockholders (the "Stock Plan"), all of which remain available for issuance to officers, directors, employees and consultants pursuant to the Stock Plan. NewCo has furnished to Pfizer complete and accurate copies of the Stock Plan and forms of agreements to be used thereunder. Promptly following the Closing, the NewCo's board of directors shall amend the Stock Plan to provide for a share reserve equal to 10% of the fully diluted capitalization of NewCo (including the 1,000,000 shares of Common Stock reserved for issuance pursuant to this Section 7.2(b)) as of the Closing.

(c) Schedule 7.2(c) sets forth the capitalization of NewCo immediately following the Closing including the number of shares of the following, if any: (i) issued and outstanding Common Stock, including, with respect to restricted Common Stock, vesting schedule

and repurchase price; (ii) granted stock options, including vesting schedule and exercise price; (iii) shares of Common Stock reserved for future award grants under the Stock Plan; (iv) each series of Preferred Stock; and (v) warrants or stock purchase rights, if any. Except for (A) the conversion privileges of the Preferred Stock to be issued under the Preferred Stock Purchase Agreement, (B) the issuance of Preferred Stock pursuant to the Preferred Stock Purchase Agreement, (C) the rights provided in Section 4 of the Investors' Rights Agreement, and (D) the securities and rights described in Schedule 7.2(c), as of the Closing, there will be no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal or similar rights) or agreements, orally or in writing, to purchase or acquire from NewCo any shares of Common Stock or Preferred Stock, or any securities convertible into or exchangeable for shares of Common Stock or Preferred Stock. As of the Closing, all outstanding shares of the Common Stock and all shares of Common Stock underlying outstanding options

---

will be subject to (i) a right of first refusal in favor of NewCo first, and the holders of the Class A Preferred Stock second, upon any proposed transfer (other than transfers for estate planning purposes); and (ii) a lock-up or market standoff agreement of not less than 180 days following NewCo's initial public offering pursuant to a registration statement filed with the Securities and Exchange Commission under the Securities Act of 1933.

(d) As of the Closing, none of NewCo's stock purchase agreements or stock option documents will contain a provision for acceleration of vesting (or lapse of a repurchase right) or other changes in the vesting provisions or other terms of such agreement or understanding upon the occurrence of any event or combination of events, including without limitation in the case where the Stock Plan is not assumed in an acquisition. NewCo has never adjusted or amended the exercise price of any stock options previously awarded, whether through amendment, cancellation, replacement grant, repricing, or any other means. NewCo has no obligation (contingent or otherwise) to purchase or redeem any of its capital stock.

(e) 409A. NewCo believes in good faith that any "nonqualified deferred compensation plan" (as such term is defined under Section 409A(d)(1) of the Code and the guidance thereunder) under which NewCo makes, is obligated to make or promises to make, payments (each, a "409A Plan") complies in all material respects, in both form and operation, with the requirements of Section 409A of the Code and the guidance thereunder. To the knowledge of NewCo, no payment to be made under any 409A Plan is, or will be, subject to the penalties of Section 409A(a)(1) of the Code.

7.3 Subsidiaries. NewCo does not currently own or control, directly or indirectly, any interest in any other corporation, partnership, trust, joint venture, limited liability company, association or other business entity. NewCo is not a participant in any joint venture, partnership or similar arrangement.

7.4 Power and Authority Relative to this Agreement. All corporate action required to be taken by the NewCo's Board of Directors and stockholders in order to authorize NewCo to enter into this Agreement and the Transaction Agreements, and to issue the Equity Consideration at the Closing and the Common Stock issuable upon conversion of the Equity Consideration, has been taken. All action on the part of the officers of the NewCo necessary for the execution and delivery of this Agreement and the Transaction Agreements, the performance of all obligations of NewCo under this Agreement and the Transaction Agreements to be performed as of the Closing, and the issuance and delivery of the Equity Consideration has been taken. This Agreement and the Transaction Agreements, when executed and delivered by NewCo, shall constitute valid and legally binding obligations of NewCo, enforceable against NewCo in accordance with their respective terms, except as such enforcement may be subject to the Enforceability Exceptions.

7.5 No Consent. Other than as set forth on Schedule 7.5, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local Governmental Authority is required on the part of NewCo in connection with the consummation by NewCo of the Transactions, except for (i) the filing of the Restated Certificate, which will have been filed as of the Closing and (ii) filings pursuant to Regulation D of the Securities Act and applicable state securities laws, which will be made in a timely manner.

The execution and delivery by NewCo of this Agreement and the other Transaction Agreements, as applicable, does not, and the consummation of the Transactions and compliance with the provisions hereof will not result in a violation or default of any provisions of the Initial NewCo Organizational Documents or the Post-Closing NewCo Organizational Documents.

7.6 Investigations; Litigation. There is no claim, action, suit, proceeding, arbitration, complaint, charge or investigation pending or to NewCo's knowledge, currently threatened: (i) against NewCo or any officer, director, Key Employee or Founder of NewCo; (ii) that questions the validity of this Agreement or the Transaction Agreements or the right of NewCo to enter into them, or to consummate the transactions contemplated by this Agreement or the Transaction Agreements; or (iii) to NewCo's knowledge, that would reasonably be expected to have, either individually or in the aggregate, a material adverse effect on NewCo's ability to consummate the Transactions. Neither NewCo nor, to NewCo's knowledge, any of its officers, directors, Key Employees or Founders is a party or is named as subject to the provisions of any order, writ, injunction, judgment or decree of any court or government agency or instrumentality (in the case of officers, directors, Key Employees or Founders such as would affect NewCo). There is no action, suit, proceeding or investigation by NewCo pending or which NewCo intends to initiate. The foregoing includes, without limitation, actions, suits, proceedings or investigations pending or threatened in writing (or any basis therefor known to NewCo) involving the prior employment of any of the NewCo's employees, their services provided in connection with NewCo's business, any information or techniques allegedly proprietary to any of their former employers or their obligations under any agreements with prior employers.

7.7 Finders or Brokers. NewCo has not retained any broker or finder or incurred any Liability for any brokerage fees, commissions or finders fees with respect to this Agreement or the Transactions.

7.8 Solvency. Immediately after giving effect to the Transactions, NewCo shall be solvent and shall: (a) be able to pay its debts as they become due; and (b) have adequate capital to carry on its business. No transfer of property is being made and no obligation is being incurred in connection with the transactions contemplated hereby with the intent to hinder, delay or defraud either present or future creditors of Pfizer or NewCo. In connection with the Transactions, NewCo has not incurred, nor plans to incur, debts beyond its ability to pay as they become absolute and matured.

7.9 Funding. NewCo hereby represents and warrants that (i) on or before the Effective Date, NewCo shall have entered into the equity commitment letters with each of the Other Investors, which are attached hereto as Exhibit G (such letters, the "Equity Commitment Letters"), and pursuant to which the Other Investors have collectively committed to provide an aggregate of two hundred sixty-five million dollars ($265,000,000) of funding to NewCo on the terms and subject to the conditions set forth in the Equity Commitment Letters (the "Financing"), and (ii) that none of the Equity Commitment Letters has been amended, modified, terminated or withdrawn and that each of the Equity Commitment Letters is in full force and effect.

7.10 Valid Issuance of Shares. The Class A Preferred Stock, when issued, sold and delivered in accordance with the terms and for the consideration set forth in this Agreement, will be validly issued, fully paid and non-assessable and free of restrictions on transfer other than restrictions on transfer under the Restated Certificate, the Restated Bylaws or the Financing

Agreements, applicable state and federal securities laws and liens or encumbrances created by or imposed by a purchaser under the Preferred Stock Purchase Agreement. Assuming the accuracy of the representations of Pfizer in Section 4 of the Preferred Stock Purchase Agreement and subject to the filings described in the Voting Agreement, the Class A Preferred Stock will be issued in compliance with all applicable federal and state securities laws. The Common Stock issuable upon conversion of the Class A Preferred Stock has been duly reserved for issuance, and upon issuance in accordance with the terms of the Restated Certificate, will be validly issued, fully paid and non-

assessable and free of restrictions on transfer other than restrictions on transfer under the Restated Certificate, the Restated Bylaws or the Financing Agreements, applicable federal and state securities laws and liens or encumbrances created by or imposed by a purchaser under the Preferred Stock Purchase Agreement. Based in part upon the representations of Pfizer in Section 4 of the Preferred Stock Purchase Agreement and in the Voting Agreement, the Common Stock issuable upon conversion of the Class A Preferred Stock will be issued in compliance with all applicable federal and state securities laws.

7.11 Compliance with Other Instruments. NewCo is not in violation or default: (i) of any provisions of the Initial NewCo Organizational Documents, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound that is required to be listed on the disclosure schedules attached hereto,or (v) to NewCo's knowledge, of any provision of federal or state statute, rule or regulation applicable to NewCo. The execution, delivery and performance of the Transaction Agreements and the consummation of the transactions contemplated by the Transaction Agreements will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either: (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement; or (ii) an event which results in the creation of any lien, charge or encumbrance upon any assets of NewCo or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to NewCo.

7.12 Agreements; Actions.

(a) Except for the Transaction Agreements and this Agreement, there are no agreements, understandings, instruments, contracts or proposed transactions to which NewCo is a party or by which it is bound that involve: (i) obligations (contingent or otherwise) of, or payments to, NewCo in excess of $50,000, (ii) the license of any patent, copyright, trademark, trade secret or other proprietary right to or from NewCo, (iii) the grant of rights to manufacture, produce, assemble, license, market, or sell its products to any other Person that limit NewCo's exclusive right to develop, manufacture, assemble, distribute, market or sell its products, (iv) indemnification by NewCo with respect to infringements of proprietary rights, or (v) any other material restriction on the operation of NewCo's business.

(b) NewCo has not: (i) declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred any indebtedness for money borrowed or incurred any other liabilities individually in excess of $50,000 or in excess of $100,000 in the aggregate, (iii) made any loans or advances to any Person, other than ordinary advances for travel expenses, or (iv) sold, exchanged or otherwise disposed of any of its assets or rights, other than the

---

sale of its inventory in the ordinary course of business. For the purposes of (a) and (b) of this Section 7.12, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same Person (including Persons that NewCo has reason to believe are affiliated with each other) shall be aggregated for the purpose of meeting the individual minimum dollar amounts of such subsection.

(c) NewCo is not a guarantor or indemnitor of any indebtedness of any other Person.

7.13 Certain Transactions.

(a) Other than: (i) standard employee benefits generally made available to all employees, (ii) standard director and officer indemnification agreements approved by NewCo's board of directors, and (iii) the purchase of shares of NewCo's capital stock and the issuance of options to purchase shares of NewCo's Common Stock, in each instance, approved in the written minutes or written consents of NewCo's board of directors (previously provided to Pfizer and the Other Investors or their counsel), there are no agreements, understandings or proposed transactions between NewCo and any of its officers, directors, consultants, Founders or Key Employees, or any Affiliate thereof.

(b) NewCo is not indebted, directly or indirectly, to any of its directors, officers, Founders or employees or to their respective spouses or children or to any Affiliate of any of the foregoing, other than in connection with expenses or advances of expenses incurred in the ordinary course of business or employee relocation expenses and for other customary employee benefits made

generally available to all employees. None of NewCo's directors, officers, Founders or employees, or any members of their immediate families, or any Affiliate of the foregoing are, directly or indirectly, indebted to NewCo or have any: (i) material commercial, industrial, banking, consulting, legal, accounting, charitable or familial relationship with any of NewCo's customers, suppliers, service providers, joint venture partners, licensees and competitors; (ii) direct or indirect ownership interest in any firm or corporation with which NewCo is affiliated or with which NewCo has a business relationship, or any firm or corporation which competes with NewCo except that directors, officers, employees or stockholders of NewCo may own stock in (but not exceeding 2% of the outstanding capital stock of) publicly traded companies that may compete with NewCo; or (iii) financial interest in any contract with NewCo.

7.14 Rights of Registration and Voting Rights. Except as provided in the Investors' Rights Agreement, to be entered into prior to or at the Closing, NewCo is not under any obligation to register under the Securities Act of 1933 any of its currently outstanding securities or any securities issuable upon exercise or conversion of its currently outstanding securities. To NewCo's knowledge, except as contemplated in the Equity Commitment Letters or the Voting Agreement, to be entered into prior to or at the Closing, no stockholder of NewCo has entered into any agreements with respect to the voting of capital shares of NewCo.

7.15 Material Liabilities. NewCo has no liability or obligation, absolute or contingent (individually or in the aggregate), except: (i) obligations and liabilities incurred after the date of incorporation in the ordinary course of business that are not material, individually or in the aggregate, and (ii) obligations under contracts made in the ordinary course of business that would

---

not be required to be reflected in financial statements prepared in accordance with GAAP. NewCo maintains and will continue to maintain a standard system of accounting established and administered in accordance with GAAP.

7.16 Changes. Since the date of incorporation there has not been:

(a) any damage, destruction or loss, whether or not covered by insurance, that would have a Material Adverse Effect;

(b) any waiver or compromise by NewCo of a valuable right or of a material debt owed to it;

(c) any satisfaction or discharge of any lien, claim, or encumbrance or payment of any obligation by NewCo, except in the ordinary course of business and the satisfaction or discharge of which would not have a Material Adverse Effect;

(d) any material change to a material contract or agreement by which NewCo or any of its assets is bound or subject;

(e) any material change in any compensation arrangement or agreement with any employee, officer, director or stockholder;

(f) any resignation or termination of employment of any officer or Key Employee of NewCo;

(g) any mortgage, pledge, transfer of a security interest in, or lien, created by NewCo, with respect to any of its material properties or assets, except liens for taxes not yet due or payable and liens that arise in the ordinary course of business and do not materially impair NewCo's ownership or use of such property or assets;

(h) any loans or guarantees made by NewCo to or for the benefit of its employees, officers or directors, or any members of their immediate families, other than travel advances and other advances made in the ordinary course of its business;

(i) any declaration, setting aside or payment or other distribution in respect of any of NewCo's capital stock, or any direct or indirect redemption, purchase, or other acquisition of any of such stock by NewCo;

(j) any sale, assignment or transfer of any NewCo Intellectual Property that could reasonably be expected to result in a Material Adverse Effect;

(k) any other event or condition of any character, other than events affecting the economy of NewCo's industry generally, that could reasonably be expected to result in a Material Adverse Effect; or

(l) any arrangement or commitment by NewCo to do any of the things described in this Section 7.16.

7.17 Employee Matters.

(a) As of the date hereof, NewCo employs three full-time employees and no part-time employees and engages no consultants or independent contractors. Schedule 7.17(a) sets forth a detailed description of all compensation, including salary, bonus, severance obligations and deferred compensation paid or payable for each officer, employee, consultant and independent contractor of NewCo who received annualized compensation in excess of $100,000 for the fiscal year ended December 31, 2017 or is anticipated to receive annualized compensation in excess of that amount for the fiscal year ending December 31, 2018.

(b) None of its employees is obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with such employee's ability to promote the interest of NewCo or that would conflict with NewCo's business. Neither the execution or delivery of the Transaction Agreements, nor the carrying on of NewCo's business by the employees of NewCo, nor the conduct of NewCo's business as now conducted and as presently proposed to be conducted, will, to NewCo's knowledge, conflict with or result in a breach of the terms, conditions, or provisions of, or constitute a default under, any contract, covenant or instrument under which any such employee is now obligated.

(c) NewCo is not delinquent in payments to any of its employees, consultants, or independent contractors for any wages, salaries, commissions, bonuses, or other direct compensation for any service performed for it to the date hereof or amounts required to be reimbursed to such employees, consultants or independent contractors. NewCo has complied in all material respects with all applicable state and federal equal employment opportunity laws and with other laws related to employment, including those related to wages, hours, worker classification and collective bargaining. NewCo has withheld and paid to the appropriate governmental entity or is holding for payment not yet due to such governmental entity all amounts required to be withheld from employees of NewCo and is not liable for any arrears of wages, taxes, penalties or other sums for failure to comply with any of the foregoing.

(d) To NewCo's knowledge, no Key Employee intends to terminate employment with NewCo or is otherwise likely to become unavailable to continue as a Key Employee. NewCo does not have a present intention to terminate the employment of any of the foregoing. The employment of each employee of NewCo is terminable at the will of NewCo. Except as set forth in Schedule 7.17(d) or as required by law, upon termination of the employment of any such employees, no severance or other payments will become due. Except as set forth in Schedule 7.17(d), NewCo has no policy, practice, plan or program of paying severance pay or any form of severance compensation in connection with the termination of employment services.

(e) NewCo has not made any representations regarding equity incentives to any officer, employee, director or consultant that are inconsistent with the share amounts and terms set forth in the minutes of meetings of NewCo's board of directors.

(f) Schedule 7.17(f) of the Disclosure Schedule sets forth each employee benefit plan maintained, established or sponsored by NewCo, or which NewCo

participates in or contributes to, which is subject to ERISA. NewCo has made all required contributions and has no liability to any such employee benefit plan, other than liability for health plan continuation coverage described in Part 6 of Title I(B) of ERISA, and has complied in all material respects with all applicable laws for any such employee benefit plan.

(g) To NewCo's knowledge, none of the Key Employees, Founders or directors of NewCo has been: (i) subject to voluntary or involuntary petition under the federal bankruptcy laws or any state insolvency law or the appointment of a receiver, fiscal agent or similar officer by a court for his or her business or property; (ii) convicted in a criminal proceeding or named as a subject of a pending criminal proceeding (excluding traffic violations and other minor offenses); (iii) subject to any order, judgment or decree (not subsequently reversed, suspended, or vacated) of any court of competent jurisdiction permanently or temporarily enjoining him or her from engaging, or otherwise imposing limits or conditions on his or her engagement in any securities, investment advisory, banking, insurance, or other type of business or acting as an officer or director of a public company; or (iv) found by a court of competent jurisdiction in a civil action or by the United States Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated any federal or state securities, commodities, or unfair trade practices law, which such judgment or finding has not been subsequently reversed, suspended, or vacated.

7.18 Tax Returns and Payments. There are no federal, state, county, local or foreign taxes due and payable by NewCo which have not been timely paid. There are no accrued and unpaid federal, state, county, local or foreign taxes of NewCo which are due, whether or not assessed or disputed. There have been no examinations or audits of any tax returns or reports by any applicable federal, state, local or foreign governmental agency. NewCo has duly and timely filed all federal, state, county, local and foreign tax returns required to have been filed by it and there are in effect no waivers of applicable statutes of limitations with respect to taxes for any year.

7.19 Insurance. NewCo has in full force and effect insurance policies concerning such casualties as would be reasonable and customary for companies like NewCo with extended coverage, sufficient in amount (subject to reasonable deductions) to allow it to replace any of its properties that might be damaged or destroyed.

7.20 Employee Agreements. Each current and former employee, consultant and officer of NewCo has executed an agreement with NewCo regarding confidentiality and proprietary information substantially in the form or forms delivered to the counsel for Pfizer and the Other Investors (the "Confidential Information Agreements"). No current or former Key Employee has excluded works or inventions from his or her assignment of inventions pursuant to such Key Employee's Confidential Information Agreement. NewCo is not aware that any of its Key Employees is in violation of any agreement covered by this Section 7.20.

7.21 Permits. Except as set forth on Schedule 7.21, NewCo has all franchises, permits, licenses and any similar authority necessary for the conduct of its business, the lack of which could reasonably be expected to have a Material Adverse Effect. NewCo is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

7.22 Corporate Documents. The Restated Certificate and the Restated Bylaws are in the form provided to Pfizer and the Other Investors. The copy of the minute books of NewCo provided to Pfizer and the Other Investors contains minutes of all meetings of directors and stockholders and all actions by written consent without a meeting by the directors and stockholders since the date of incorporation and accurately reflects in all material respects all actions by the directors (and any committee of directors) and stockholders with respect to all transactions referred to in such minutes.

7.23 Foreign Corrupt Practices Act. Neither NewCo nor any of its directors, officers, employees or agents have, directly or indirectly, made, offered, promised or authorized any payment or gift of any money or anything of value to or for the benefit of any "foreign official" (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "FCPA")), foreign political party or official thereof or candidate for foreign political office for the purpose of: (i) influencing any official act or decision of such official, party or candidate, (ii) inducing such official, party or candidate to use his, her or its influence to affect any act or decision of a foreign governmental authority, or (iii) securing any improper advantage, in the case of (i), (ii) and (iii) above in order to assist NewCo or any of its affiliates in obtaining or retaining business for or with, or directing business to, any person. Neither NewCo nor any of its directors, officers, employees or agents have made or authorized any bribe, rebate, payoff, influence payment, kickback or other unlawful payment of funds or received or retained

any funds in violation of any law, rule or regulation. NewCo further represents that it has maintained, and has caused each of its affiliates to maintain, systems of internal controls (including, but not limited to, accounting systems, purchasing systems and billing systems) and written policies to ensure compliance with the FCPA or any other applicable anti-bribery or anti-corruption law, and to ensure that all books and records of NewCo accurately and fairly reflect, in reasonable detail, all transactions and dispositions of funds and assets. Neither NewCo nor, to NewCo's knowledge, any of its officers, directors or employees are the subject of any allegation, voluntary disclosure, investigation, prosecution or other enforcement action related to the FCPA or any other anti-corruption law.

7.24 Data Privacy. In connection with its collection, storage, transfer (including, without limitation, any transfer across national borders) and/or use of any personally identifiable information from any individuals, including, without limitation, any customers, prospective customers, employees and/or other third parties (collectively "Personal Information"), NewCo is and has been in compliance in all material respects with all applicable laws in all relevant jurisdictions, NewCo's privacy policies and the requirements of any contract or codes of conduct to which NewCo is a party. NewCo has commercially reasonable physical, technical, organizational and administrative security measures and policies in place to protect all Personal Information collected by it or on its behalf from and against unauthorized access, use and/or disclosure. To the extent NewCo maintains or transmits protected health information, as defined under 45 C.F.R. § 160.103, NewCo is in compliance with the applicable requirements of the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, including all rules and regulations promulgated thereunder. NewCo is and has been in compliance in all material respects with all laws relating to data loss, theft and breach of security notification obligations.

7.25 Non-Reliance. Except for the representations and warranties contained in ARTICLE 6 of this Agreement (including the related portions of the disclosure schedules

---

attached hereto), the General Assignment and Bill of Sale, the Patent Assignment, and Section 7 of the Patent and Know-How License Agreement, neither Pfizer nor any of its agents, employees or representatives have made, nor are any of them making any representation or warranty, written or oral, express or implied, in respect of the Purchased Programs and the Purchased Assets, including any representations and warranties about the accuracy or completeness of any information or documents previously provided, and any such other representations and warranties are hereby expressly disclaimed. NewCo expressly acknowledges and agrees that neither NewCo nor any of NewCo's agents, employees or representatives is relying on any other representation or warranty of Pfizer or any of its agents, employees or representatives, including regarding the accuracy or completeness of any such other representations and warranties or the omission of any material information, whether express or implied.

ARTICLE 8

PRE-CLOSING COVENANTS

8.1 Conduct of the Purchased Programs Prior to Closing.

(a) From the date of this Agreement until the Closing, except as otherwise permitted by this Agreement, set forth in Schedule 8.1, consented to by NewCo in writing (which consent shall not be unreasonably withheld or delayed) or directed, directly or indirectly, by NewCo, Pfizer agrees to use (and to cause each Pfizer Party to use) commercially reasonable efforts to:

(i) maintain in effect all Pfizer Assigned IP Rights and Governmental Approvals and applications and registrations included in the Pfizer Assigned IP Rights and Governmental Approvals in the ordinary course of business consistent with past practice;

(ii) maintain all Purchased Inventory and physical Purchased Assets in its present repair, order and condition in the ordinary course of business consistent with past practice, except for depletion and ordinary wear and tear;

(iii) perform its obligations in all material respects under the Assigned Contracts;

(iv) maintain and perform material obligations under Governmental Approvals and materially comply with all applicable Laws relating the Purchased Programs and the Purchased Assets;

(v) keep in full force and effect all material rights relating to the Purchased Programs; and

(vi) continue to operate, conduct, further develop and advance the Purchased Programs in the ordinary course of business, consistent with past practices.

(b) From the date of this Agreement until the Closing (or, with respect to clause (ix), the Employee Transfer Date), except as otherwise permitted by this

---

Agreement, set forth in Schedule 8.1, consented to by NewCo in writing (which consent shall not be unreasonably withheld or delayed) or directed, directly or indirectly, by NewCo, Pfizer will not (and Pfizer will cause each of its Affiliates not to):

(i) pledge, sell, lease, transfer, license (exclusive or non-exclusive), assign, impair, dispose of or otherwise make subject to a Lien (other than any Permitted Liens) any Purchased Asset outside of the ordinary course of business consistent with past practice, other than the sale of Purchased Inventory or obsolete, worn-out or excess equipment or assets in the ordinary course of business consistent with past practice;

(ii) cancel or waive any material claims or rights that relate to the Purchased Assets or commence, settle, or agree to settle any Proceeding with any Governmental Authority or other Person relating to the Purchased Programs or any Purchased Asset or any Assumed Liability;

(iii) transfer, assign or grant any license (exclusive or non-exclusive) or sublicense of any rights under or with respect to any Pfizer Assigned IP Rights or Group 3 Pfizer IP Rights other than non-exclusive licenses in the ordinary course of business consistent with past practice;

(iv) change, amend or otherwise modify, or waive any material claims or rights under, or terminate any Assigned Contract that has a value, payment or other obligations in excess of $[***] individually or $[***] in the aggregate;

(v) enter into any Contract in connection with the Purchased Programs with an obligation or value in excess of $[***] individually or $[***] in the aggregate;

(vi) make any write down in the value of the Purchased Inventory and physical Purchased Assets, except as required by applicable Law or GAAP;

(vii) abandon or permit the lapse of, as applicable, any Pfizer Assigned IP Rights to the extent that Pfizer or any of its Affiliates controls prosecution and maintenance of such Pfizer Assigned IP Rights;

(viii) take any action related to the Purchased Programs which would adversely affect, or impede or impair, the ability of the parties hereto, to consummate the Transactions;

(ix) hire or terminate the employment of any Prospective Employee (other than for cause), increase any Prospective Employee's salary or benefits or alter any Prospective Employee's responsibilities (other than, in each case, (A) annual salary increases in the ordinary course of business or (B) increases in benefits under any Covered Benefit Plan in the ordinary course of business or (C) increases required by Law or the terms of a Covered Benefit Plan); or

(x) agree, whether in writing or otherwise, to do any of the foregoing.

8.2 Access to Information. From the date of this Agreement until the Closing or the earlier termination of this Agreement pursuant to its terms, Pfizer and its Affiliates shall (a) permit NewCo and its Representatives to have reasonable access to all books, records (including Tax records), contracts and documents exclusively pertaining to the Purchased Programs or the Purchased Assets and (b) furnish NewCo with all financial, operating and other data and information related exclusively to the Purchased Programs (including copies thereof) as NewCo may reasonably request; *provided, however*, that Pfizer shall not be required to permit any inspection or other access, or to disclose any information that in the reasonable judgment of Pfizer would: (i) result in the disclosure of any Trade Secrets, (ii) violate any obligation of Pfizer with respect to confidentiality entered into prior to the date of this Agreement, (iii) violate or result in the loss or material impairment of any information subject to the attorney-client privilege or the attorney work product doctrine, (iv) cause competitive harm to any Pfizer Party, (v) violate any Law or (vi) result in disclosure of the Consolidated Returns. Any such access will be provided or conducted during normal business hours upon reasonable advance notice to Pfizer, under the reasonable supervision of Pfizer's personnel and in such a manner as not to interfere with the normal operations of Pfizer and its Affiliates. All requests by NewCo for access pursuant to this Section 8.2 shall be submitted or directed exclusively to such individual or individuals as Pfizer may designate in writing from time to time (including in response to NewCo's request). Prior to the Closing, without the prior written consent of Pfizer, which will not be unreasonably withheld or delayed, none of NewCo or any of its Affiliates shall contact any employees of, suppliers to, or any other Person with a material business relationship with Pfizer or its Affiliates regarding the Purchased Programs. NewCo shall, and shall cause its Affiliates to, abide by the terms of the Confidential Disclosure Agreement with respect to any access or information provided pursuant to this Section 8.2 or otherwise, in accordance with the terms of such Confidential Disclosure Agreement.

8.3 Commercially Reasonable Efforts. Subject to the terms and conditions of this Agreement, from the date of this Agreement to the Closing, or the earlier termination of this Agreement pursuant to its terms, each party hereto shall cooperate with the other party hereto and use (and shall cause their respective Affiliates to use) their respective commercially reasonable efforts to promptly take, or cause to be taken, all actions, and do, or cause to be done, all things, necessary, proper or advisable to cause the conditions to Closing set forth in ARTICLE 11 to be satisfied (but not waived) as promptly as practicable. In furtherance and not in limitation of the covenants of the parties contained in this Section 8.3, each of the parties hereto shall use its reasonable best efforts to resolve such objections, if any, as may be asserted by a Governmental Authority in any jurisdiction in which information on consultation obligations are required by applicable Laws to consummate the Transactions.

8.4 Consents. Without limiting the provisions of Section 8.3, on or prior to the Closing Date, each of the Pfizer Parties shall use its respective commercially reasonable efforts to obtain all Consents and make and deliver all filings and notices listed on Schedule 8.4(a), and NewCo shall use commercially reasonable efforts to obtain all Consents and make and deliver all filings and notices listed on Schedule 8.4(b), *provided*, *however*, that nothing in this Section 8.4 shall require any of the Pfizer Parties or any of their Affiliates to modify any of its respective rights in a manner adverse to any of the Pfizer Parties or any of their Affiliates or to pay any fee or other payment, or incur any Liability, cost or out-of-pocket expense in connection with the

efforts set forth in this Section 8.4, with any such Liabilities, costs or out-of-pocket expenses to be borne by NewCo.

8.5 Exclusive Dealing.

(a) From the date of this Agreement until the earlier of (i) the termination of this Agreement pursuant to its terms or (ii) the Closing, the Pfizer Parties, the Pfizer Parties' Subsidiaries and their respective Representatives shall not, without the prior written

consent of NewCo, directly or indirectly, (x) solicit, knowingly encourage or initiate any contact concerning the submission of any inquiry, proposal or offer from any entity or person (other than NewCo) or (y) participate in any discussions or negotiations or enter into any agreement with, or provide any additional non-public information to, any entity or person (other than NewCo), in each case relating to a sale of all or any material part of the Purchased Programs or Purchased Assets (whether by way of merger, purchase of capital stock, purchase of assets, granting of licenses or similar transaction or a sale of a Subsidiary of Pfizer that holds or owns all or any material part of the Purchased Programs or Purchased Assets).

(b) From the date of this Agreement until the Closing, the Pfizer Parties, their Affiliates and their respective Representatives shall cease all discussions with any Person (other than NewCo) regarding any of the matters covered by this Section 8.5, including terminating any such Person's access to the Pfizer Parties' electronic data room, and shall promptly cause their Representatives to request the return or destruction of all non-public information concerning the Purchased Programs and/or the Purchased Assets that has been furnished to any person or entity with whom a confidentiality agreement was entered into at any point within the 12-month period immediately prior to the Effective Date. The Pfizer Parties acknowledge and agree, for itself and each of the persons and entities referred to above, that any remedy at law for breach of the covenants of this Section 8.5 would be inadequate, and in addition to any other relief which may be available, NewCo will be entitled to temporary and permanent injunctive relief without the necessity of proving actual damages and without regard to the adequacy of any remedy at law.

8.6 Financing.

(a) NewCo and its Affiliates shall use their reasonable best efforts to obtain the Financing, including by using their reasonable best efforts to deliver all documents and instruments reasonably necessary to satisfy the conditions set forth in the Equity Commitment Letter and otherwise seeking to cause the conditions set forth in the Equity Commitment Letter to be fulfilled in accordance with its terms. If at any time it becomes likely (as determined in the reasonable judgment of NewCo) that NewCo and its Affiliates will be unable for any reason to consummate the Financing, NewCo and its Affiliates shall use their reasonable best efforts to seek alternative financing.

(b) NewCo and its Affiliates shall not amend, modify or change any of the conditions in the Equity Commitment Letter in a manner that would reasonably be expected to materially delay or prevent the Closing without the prior written consent of Pfizer, such consent not to be unreasonably withheld, conditioned or delayed, and, subject to the satisfaction of all the conditions to the Closing set forth in this Agreement,

---

NewCo and its Affiliates shall draw down on the financing referred to in the Equity Commitment Letter when the conditions set forth in the Equity Commitment Letter are satisfied.

8.7 Pre-Closing Cooperation. From the date of this Agreement until the earlier of Closing or termination of this Agreement pursuant to Section 13.1, each party shall, and shall cause its Affiliates and their respective directors, officers, employees and other Representatives to, from time to time, at the reasonable request of the other party, cooperate with the other party and use reasonable best efforts to facilitate the transactions contemplated by the Transaction Agreements, provided, however, that any access or furnishing of information shall be conducted during normal business hours, under the supervision of the other party's personnel and in such a manner as not unreasonably to interfere with the normal operations of the other party. Notwithstanding anything to the contrary in this Agreement, the other party shall not be required to disclose any information to the requesting party or its Representatives if such disclosure would, in the other party's good faith determination, (i) jeopardize any attorney-client or other legal privilege or (ii) contravene any applicable Laws, fiduciary duty or binding agreement entered into prior to the date hereof.

8.8 Conduct of NewCo Prior to Closing. From the date of this Agreement until the Closing, except as consented to by Pfizer in writing, NewCo will not issue any Common Stock, Series A Preferred Stock or any other equity security of NewCo except as expressly contemplated by this Agreement or the Preferred Stock Purchase Agreement or amend or enter into any side letter or similar agreement with respect to, waive any provision of, or otherwise modify in any respect any of the Equity Commitment Letters.

ARTICLE 9

POST-CLOSING COVENANTS

9.1 Cooperation. After the Closing, upon the reasonable request of NewCo and at NewCo's expense for any costs or expense of Third Parties, Pfizer shall, and shall cause each other Pfizer Party to, (i) use reasonable best efforts during the Cooperation Period following the Closing to (a) execute and deliver any and all further materials, documents and instruments of conveyance, transfer or assignment as may reasonably be requested by NewCo to effect, record or verify the transfer to and vesting in NewCo of such Pfizer Party's right, title and interest in and to the Purchased Assets, free and clear of all Liens other than the Permitted Liens, in accordance with the terms of this Agreement, (b) deliver physical possession of the Purchased Assets to NewCo, (c) cooperate with reasonable requests from NewCo to assist in an orderly transfer of supplier relationships involving the Purchased Programs to NewCo, and (ii) use commercially reasonable efforts to perform the post-Closing covenants set forth on Schedule 9.1; *provided,however*, that nothing in this Section 9.1 shall require any Pfizer Party or its Affiliates to modify any of its respective rights in a manner adverse to such party or any of their Affiliates or to pay any fee or other payment, or incur any Liability, cost or out-of-pocket expense in connection with the efforts set forth in this Section 9.1, with any such Liabilities, costs or out-of-pocket expenses to be borne by NewCo. After the Closing, each Pfizer Party shall promptly deliver to NewCo any mail, packages, orders, inquiries and other communications addressed to such Pfizer Party and to the extent relating to the Purchased Programs.

9.2 Return of Assets; Transfer of Purchased Assets.

(a) If, for any reason after the Closing, any asset is ultimately determined to be an Excluded Asset or NewCo is found to be in possession of any Excluded Asset or subject to an Excluded Liability, (i) NewCo shall return or transfer and convey (without further consideration) to the appropriate Pfizer Party, and such Pfizer Party shall accept or assume, as applicable, such asset or Excluded Liability; (ii) the appropriate Pfizer Party shall assume (without further consideration) any Liabilities associated with such assets or Excluded Liabilities; and (iii) NewCo and the appropriate Pfizer Party shall execute such documents or instruments of conveyance or assumption and take such further acts which are reasonably necessary or desirable to effect the transfer of such asset or Excluded Liability back to the Pfizer Party.

(b) In the event that any Purchased Asset or Assumed Liability is discovered by Pfizer or any of its Affiliates or identified to Pfizer in writing by NewCo at any time after the Closing Date, possession or ownership of which has not been transferred to, or assumed by (without further consideration), either NewCo or its Affiliates at such time, the Pfizer Parties shall promptly take such steps as may be required to transfer, or cause to be transferred, such Purchased Assets or Assumed Liabilities to NewCo, subject to Section 2.5 and otherwise in accordance with the terms of this Agreement, at no additional charge to NewCo or its Affiliates, and NewCo or its Affiliates shall accept such Purchased Assets or assume such Assumed Liabilities, as the case may be.

9.3 Records and Documents. For a period of [***] years after the Closing, at the other party's request, each party shall provide the other party and its Representatives with access to and the right to make copies of those records and documents to the extent related to the Purchased Programs (possession of which is retained by a Pfizer Party or transferred to NewCo, as applicable), as may be reasonably necessary in connection with any Third Party litigation, or the conduct of any audit or investigation by a Governmental Authority. Notwithstanding anything to the contrary in this Section 9.3, Pfizer or the Pfizer Parties, as applicable, shall provide to NewCo reasonable access to, and the right to make copies of, Tax Returns that relate primarily to the Purchased Programs or the Purchased Assets, and NewCo shall not have access or the right to make copies of any other Tax Returns*provided,* that in no event shall Pfizer or the Pfizer Parties, as applicable, provide access to Consolidated Returns.

9.4 Bulk Sales Waiver. NewCo hereby waives compliance by each Pfizer Party with any applicable bulk sales Laws in connection with the Transactions.

9.5 Confidentiality.

(a) Definitions. "Confidential Information" shall mean: (a) all non-public or proprietary information (including Know-How) that is disclosed by or on behalf of a party (the "Disclosing Party") (or any of its Affiliates) to the other party (the "Receiving Party", each a "Party" for purposes of this Section 9.5) or any of its Representatives pursuant to or in connection with this Agreement or the Confidential Disclosure Agreement or the Patent and Know-How License Agreement (including the terms thereof); and (b) all other non-public or proprietary information (including Know-How) that is expressly deemed in this Agreement or the Patent and Know-How License Agreement to be Confidential Information, whether or not disclosed by or on behalf of a party (or any of its Affiliates) to the other party, any of its Affiliates or any of their

respective employees, agents or contractors, in each case ((a) or (b)), without regard as to whether any of the foregoing is marked "confidential" or "proprietary," or in oral, written, graphic or electronic form. The terms of this Agreement shall be deemed to be both parties' Confidential Information. Pfizer's Confidential Information shall include all such information disclosed in connection with NewCo's due diligence investigation of the Purchased Programs, the Purchased Assets and the evaluation of the Transactions, including pursuant to Section 8.2; provided that, subject to the Patent and Know-How License Agreement, all Know-How (including unpublished patent applications) included in the Pfizer Assigned IP Rights, and all Confidential Information contained in or exclusively related to the Assigned Contracts, the Books and Records and the Other Assets shall, as between Pfizer and NewCo, be deemed to be NewCo's Confidential Information as of the Closing Date, such that NewCo shall be deemed to be the Disclosing Party with respect thereto, Pfizer shall be deemed to be the Receiving Party with respect thereto, and Section 9.6(b)(i) below shall not apply to such Confidential Information.

(b) Exclusions. Information shall not be deemed to be Confidential Information of the Disclosing Party to the extent that the Receiving Party can demonstrate:

(i) through competent evidence that such information is known by the Receiving Party at the time of its receipt who is not known by the Receiving Party to be under an obligation of confidentiality, and not through a prior disclosure by the Disclosing Party;

(ii) that such information is in the public domain before its receipt from the Disclosing Party, or thereafter enters the public domain through no breach of this Agreement by the Receiving Party;

(iii) that such information is subsequently disclosed to the Receiving Party by a Third Party who is not known by the Receiving Party to be under an obligation of confidentiality to the Disclosing Party; or

(iv) through competent evidence that such information is discovered or developed by or on behalf of the Receiving Party independently and without use of or reference to any Confidential Information received from the Disclosing Party.

(c) Duty of Confidence. Subject to the other provisions of this Section 9.5, for a period of [***] years after the Closing Date:

(i) The Receiving Party shall maintain in confidence and otherwise safeguard the Disclosing Party's Confidential Information in the same manner and with the same protections as the Receiving Party maintains its own confidential information, but in any event no less than reasonable efforts;

(ii) the Receiving Party may only use any such Confidential Information for the purposes of performing its obligations or exercising its rights under the Transaction Agreements;

(iii) the Receiving Party may only disclose the Disclosing Party's Confidential Information to its Affiliates (and, in the case of NewCo as the Receiving Party, its licensees and sublicensees) and its and their respective Representatives, in each case to the extent reasonably necessary for the purposes of performing its obligations or exercising its rights under this Agreement; provided that such Persons are bound by legally enforceable obligations to maintain the confidentiality of the Confidential Information in a manner consistent with the confidentiality provisions of this Agreement.

(d) Authorized Disclosures. Notwithstanding the obligations set forth in this Section 9.6, the Receiving Party may disclose the Disclosing Party's Confidential Information to the extent:

(i) such disclosure is reasonably necessary: (A) to the Receiving Party's Representatives (including attorneys, independent accountants or financial advisors) for the sole purpose of enabling such Representatives to provide advice to such Receiving Party, provided that in each such case such recipients are bound by confidentiality and non-use obligations that are at least as restrictive as those contained in this Agreement; or (B) to actual or bona fide potential investors, potential acquirors, licensees or other financial, development or commercial partners solely for the purpose of evaluating or carrying out an actual or potential investment, acquisition or collaboration, provided that in each such case such recipients are bound by confidentiality and non-use obligations at least as restrictive as those contained in the Agreement;

(ii) such disclosure is to a Governmental Authority and necessary or desirable (A) to obtain or maintain INDs, Regulatory Approvals or Price Approval for any product (subject to the limitations of any license grant to the Receiving

(iii) Party related to the use of such Confidential Information), within the Territory, or (B) in order to respond to inquiries, requests or investigations by such Governmental Authority relating to Products or this Agreement;

(iv) such disclosure is required by Law, judicial or administrative process, provided that, except for disclosures governed by the last two sentences of Section 9.6(e) below, the Receiving Party, to the extent legally permitted, shall promptly inform the Disclosing Party of such required disclosure and provide the Disclosing Party an opportunity to challenge or limit the disclosure obligations, provided that Confidential Information that is disclosed pursuant to subsection (ii) above or this subsection (iii) shall remain otherwise subject to the confidentiality and non-use provisions of this Section 9.6 (provided that such disclosure is not a public disclosure), and the Receiving Party shall cooperate with and reasonably assist the Disclosing Party if the Disclosing Party seeks a protective order or other remedy in respect of any such disclosure. In any event, the Receiving Party shall furnish only that portion of the Confidential Information which, in the advice of the Receiving Party's legal counsel, is responsive to such requirement or request;

(v) such disclosure is reasonably necessary to exercise its right to prepare, file, prosecute, maintain and extend Patents in a manner consistent with the Patent and Know-How License Agreement, including any obligation to cooperate with the Disclosing Party therein; or

(vi) necessary in order to enforce its rights under the Agreement; or

(vii) in the case of Pfizer as the Receiving Party, with respect to Know-How in the Pfizer Assigned IP Rights which is other than that within the Group 1 Pfizer IP Rights, to the extent useful or necessary to exercise and enjoy the rights in and to such Transferred Pfizer Know-How granted to Pfizer under the Patent and Know-How License Agreement.

(e) SEC Filings and Other Disclosures. Either Party may disclose the terms of this Agreement and make any other public written disclosure regarding the existence of, or performance under, this Agreement, to the extent required, in the reasonable advice of such Party's legal counsel, to comply with (i) applicable Law, including the rules and regulations promulgated by the United States Securities and Exchange Commission or (ii) any equivalent Governmental Authority, securities exchange or securities regulator in any

country in the Territory. Before disclosing this Agreement or any of the terms hereof pursuant to this Section 9.6(e), the parties will consult with one another on the terms of this Agreement to be redacted in making any such disclosure, with the Party making such disclosure providing reasonable advance notice, and giving consideration to the timely comments of the other Party. Further, if a Party discloses this Agreement or any of the terms hereof in accordance with this Section 9.6(e), such Party will, at its own expense, seek such confidential treatment of confidential portions of this Agreement and such other terms as it reasonably determines, giving consideration to the comments of the other Party pursuant to the preceding sentence.

9.6 Non-Solicitation of Employees.

(a) For a period of [***] after the Closing Date, without the prior written consent of Pfizer, NewCo shall not, and shall cause its Affiliates not to, solicit for employment or engagement or hire or engage as a consultant or independent contractor any of the employees, independent contractors or consultants of any Pfizer Party or any Affiliate of any Pfizer Party as of the Closing Date; *provided that* NewCo and its Affiliates shall not be restricted by this Section 9.7(a) from making any general solicitation for employees or public advertising of employment opportunities (including through the use of employment agencies) not specifically directed at any such persons and hiring persons who apply for employment as a direct result of such general solicitation or public advertising.

(b) For a period of [***] after the Closing Date, without the prior written consent of NewCo, Pfizer shall not, and shall cause its Affiliates not to, solicit for employment or engagement or hire or engage as a consultant or independent contractor any of the employees, independent contractors or consultants of NewCo as of the Closing Date; *provided that* Pfizer and its Affiliates shall not be restricted by this Section 9.7(b) from making any general solicitation for employees or public advertising of employment opportunities (including through the use of employment agencies) not specifically

---

directed at any such persons and hiring persons who apply for employment as a direct result of such general solicitation or public advertising.

(c) It is the understanding of the parties that the scope of the covenants contained in Section 9.7 as to time and area covered, are reasonable and necessary to protect the goodwill, confidential information, rights and other legitimate interests of the Pfizer Parties. It is the parties' intention that these covenants be enforced to the greatest extent (but to no greater extent) in time, area, and degree of participation as is permitted by applicable Laws. The parties further agree that, in the event that any provision of Section 9.7 shall be determined judicially to be unenforceable by reason of its being extended over too great a time or too great a range of activities, such provision shall be deemed to be modified to permit its enforcement to the maximum extent permitted by Law. The parties further agree that (i) in addition and not in the alternative to any other remedies available to it, Pfizer shall be entitled to preliminary and permanent injunctive relief against any breach or threatened breach by NewCo or any of its Affiliates of any such covenants, without having to post bond, together with an award of its reasonable attorneys' fees incurred in enforcing its rights hereunder, (ii) the restricted period applicable to NewCo and its Affiliates shall be tolled, and shall not run, during the period of any breach by NewCo or its Affiliates of any such covenants, and (iii) no breach of any provision of this Agreement shall operate to extinguish NewCo's obligation to comply with this Section 9.7.

9.7 Worker Notification Laws Matters. Without limiting NewCo's obligations under Article 10 hereof, NewCo shall not, within ninety (90) days after the Employee Transfer Date, involuntarily or constructively terminate the employment (including by making such adverse changes to terms and conditions of employment that would constitute either such termination under any applicable Worker Notification Law) of more than forty (40) of the Transferred Employees or any other employees who work in the same facility, office or location as any of the Transferred Employees. As of the Employee Transfer Date, the Pfizer Parties will provide NewCo with a list by date and location of the number of employees who work in a facility, office or location where any of the Prospective Employees will be based following the Employee Transfer Date and whose employment was involuntarily terminated by any of the Pfizer Parties within the ninety (90) days preceding the Employee Transfer Date.

9.8 [Reserved].

9.9 Reporting of Pfizer Financial Information. From and after the Effective Date, Pfizer shall (a) cooperate with NewCo or its Affiliates and their respective accountants and auditors by providing access to information, books, and records related to the Purchased Assets and Purchased Programs as NewCo may reasonably request in connection with the preparation by NewCo or its Affiliates of historical and pro forma financial statements related to the Purchased Assets and Purchased Programs as may be required to be included in any filing made by NewCo or any of its Affiliates under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, and the regulations promulgated thereunder, including Regulation S-X and (b) without limiting the foregoing, shall provide NewCo with such information as is required for NewCo or its Affiliates to prepare audited "carve out" financial statements related to the Purchased Assets and Purchased Programs, for the two (2) fiscal years prior to the Effective Date (or such shorter period as agreed to by NewCo) and information

requested by NewCo and reasonably necessary to prepare any applicable pro forma financial information required to be filed by NewCo with the United States Securities and Exchange Commission. Such cooperation shall include, as applicable, (i) the signing of management representation letters to the extent required in connection with any such audit performed by NewCo's auditors, (ii) providing NewCo or its Affiliates and their respective accountants and auditors with access to management representation letters (specifically limited to portions thereof that are directly related to the Purchased Assets) and (iii) directing Pfizer's accountants, auditors, and counsel to reasonably cooperate with NewCo or its Affiliates and its accountants, auditors, and counsel in connection with the preparation and audit of any financial information to be provided under this Section 9.11 (Reporting of Pfizer Financial Information), *provided, however,* that nothing herein shall require Pfizer to make available to NewCo or its Affiliates or their respective accountants and auditors (i) management representation letters provided by Pfizer to Pfizer's accountants and auditors that do not relate to the Purchased Assets, (ii) any communications between Pfizer and its accountants and auditors, (iii) any information prior to June 17, 2014 or following the Closing Date, (iv) any information related to valuation analyses performed by Pfizer or its Affiliates or their respective accountants, auditors or consultants or (v) any information other than historical financial information stored in Pfizer's electronic financial recording systems in the ordinary course of business. NewCo will be responsible for all costs and expenses incurred by Pfizer or its Affiliates in connection with the generation of financial information as set forth herein, including personnel-, facility- and equipment-related costs and expenses, professional fees, external "carve out" audit fees, consents, and any other fees or expenses, whether out-of-pocket or otherwise, associated with amendments and/or revisions required to support NewCo's or its Affiliates' United States Securities and Exchange Commission disclosure obligations. Notwithstanding anything to the contrary in this Agreement, in no event shall Pfizer or the Pfizer Parties, as applicable, provide access to Consolidated Returns.

ARTICLE 10

EMPLOYEES

10.1 Employees and Employee Benefits.

(a) Not later than five (5) Business Days prior to the anticipated Employee Transfer Date, NewCo shall offer, or cause one of its Affiliates to offer, employment to each Prospective Employee who is then employed by a Pfizer Party, including each Prospective Employee who is then on a leave under a Pfizer Party's short-term or long-term disability plan or under the U.S. federal Family and Medical Leave Act or leave under any other U.S. federal or state Law or other approved leave of absence (other than an unpaid personal leave) (each, an "Inactive Employee"), commencing on the Employee Transfer Date (or, in the case of any Inactive Employee, on the date provided below) in accordance with the terms of this Section 10.1, including Section 10.1(b). NewCo will provide Pfizer with a copy of the form of offer of employment at least five (5) Business Days in advance of its distribution to any Prospective Employee and will consider in good faith any comments that Pfizer may have on such form. Each Prospective Employee who is offered and accepts employment with NewCo or one of its Affiliates shall be referred to in this Agreement as a "Transferred Employee". With respect to any Inactive Employee who accepts an offer of employment, such Inactive Employee shall

become a Transferred Employee as of the date such Inactive Employee has been cleared for, and presents himself or herself to NewCo for active employment on or prior to the six (6) month anniversary of the Employee Transfer Date (or such longer period as required by applicable Law).

(b) NewCo shall provide, or shall cause an Affiliate of NewCo to provide to each Transferred Employee, and the terms of each offer of employment shall provide for, for a period of one (1) year following the Employee Transfer Date (the "Continuation Period") (i) an annual base salary or base wage rate, target annual bonus, commission rate and severance benefits, in each case, that are no less favorable than the Transferred Employee's annual base salary or base wage rate, target annual bonus, commission rate and severance benefits (except as provided in the last sentence of Section 10.1(g) and Section 10.1(i)) as of immediately prior to the Employee Transfer Date and (ii) other employee benefits (excluding equity-based compensation, defined benefits pursuant to qualified and nonqualified retirement plans, nonqualified deferred compensation plans, retiree medical benefits and other retiree health and welfare arrangements and the "retirement savings contribution" under the Pfizer Savings Plan)that are, in aggregate, materially comparable to those provided under a Covered Benefit Plan disclosed on Schedule 6.8(d) to the Transferred Employee as of immediately prior to the Employee Transfer Date.

(c) For each Prospective Employee that is not a Transferred Employee, the Pfizer Parties may elect to terminate the employment of each Prospective Employee effective as of the Employee Transfer Date (or in the case of any Prospective Employee who is then on a leave of absence, the date such Prospective Employee returns to active employment), and shall take all actions reasonably necessary to cause each Prospective Employee to cease active participation under all Pfizer Benefit Plans as of the Employee Transfer Date (or in the case of any Prospective Employee who is on a leave of absence as contemplated hereby, the date such Prospective Employee returns to active employment), or such other date as is required under the terms of the relevant Pfizer Benefit Plan or applicable Law.

(d) Pfizer shall be solely responsible for, and shall pay at the time or times due or required by applicable Law, all obligations or Liabilities, including, without limitation, hourly pay, commission, bonus, salary, accrued vacation or paid time-off, fringe benefits, pension or profit sharing benefits, or severance payments and benefits or other termination pay under the Pfizer Benefit Plans or applicable Law, arising out of or relating to the termination of the employment of the Prospective Employees by the Pfizer Parties.

(e) Pfizer and its Affiliates shall retain responsibility for and continue to pay all expenses and benefits under the Pfizer Savings Plan and all medical, dental, health, hospital, life insurance and disability expenses and benefits with respect to claims incurred under the Pfizer Benefit Plans prior to the Closing Date by Prospective Employees and their eligible beneficiaries, as determined under the terms of the applicable Pfizer Benefit Plan. Pfizer and its Affiliates shall remain solely responsible for all workers compensation claims of any Prospective Employee to the extent arising out of conditions having a date of injury prior to the Closing Date. NewCo shall have

---

responsibility for workers compensation claims of Transferred Employees to the extent arising out of conditions having a date of injury on or after the Closing Date. Pfizer and its Affiliates also shall be solely responsible for satisfying the continuation coverage requirements of Section 4980B of the Code for all individuals who are "M&A qualified beneficiaries" as such term is defined in Treasury Regulations Section 54.4980B-9. NewCo shall be responsible for providing such continuation coverage in respect of any Transferred Employee or qualified beneficiary of a Transferred Employee, in either case, who incurs a qualifying event after the Closing Date.

(f) On and following the Employee Transfer Date, each employee benefit plan sponsored by NewCo or any Affiliate of NewCo in which any Transferred Employee is eligible to participate shall credit each such Transferred Employee with his or her service with a Pfizer Party or any Affiliate of a Pfizer Party for all purposes (other than for purposes of equity-based compensation or benefit accrual

under any qualified or nonqualified retirement plan) to the extent such service was credited under the corresponding Pfizer Benefit Plan in which such Transferred Employee participated prior to the Employee Transfer Date (if there is a comparable NewCo benefit plan); *provided that* (i) such credit shall be conditioned on receipt by NewCo of evidence of such service (e.g., payroll or plan records), and (ii) such recognition of service shall not operate to duplicate any benefits with respect to any Transferred Employee. Without limiting the generality of the foregoing, on and following the Employee Transfer Date, with respect to any group health plan under which any Transferred Employee is eligible to receive benefits from NewCo or any Affiliate of NewCo, NewCo will, or will cause the applicable Affiliate of NewCo to, (x) use commercially reasonable efforts to waive or cause the insurance carrier or professional employer organization plan sponsor to waive any pre-existing condition or actively-at-work requirements or limitations and eligibility waiting periods (to the extent such requirements or limitations or waiting periods did not apply to the Transferred Employee and his or her eligible dependents under a comparable Pfizer Benefit Plan as of immediately prior to the Employee Transfer Date), and (y) give the Transferred Employee credit, for the plan year in which the Employee Transfer Date occurs, toward any applicable deductibles, co-insurance and annual out-of-pocket limits for expenses actually incurred during the plan year in which the Employee Transfer Date occurs as if such amounts had been paid under such group health plan, subject to any restrictions imposed by the professional employer organization plan sponsor.

(g) NewCo (or an Affiliate of NewCo) shall make available to Transferred Employees within a reasonable time following the Employee Transfer Date (but in no event more than ninety (90) days)participation in a cash or deferred arrangement, as described in Section 401(k) of the Code (the "NewCo 401(k) Plan"), which permits Transferred Employees to roll over their account balances from the Pfizer Savings Plan, without regard to eligibility and waiting periods. NewCo will use commercially reasonable efforts to cause the third party plan administrator for the NewCo 401(k) Plan to permit Transferred Employees to roll over any outstanding participant loans into the NewCo 401(k) Plan. In the event that rollover of an outstanding participant loan is not possible prior to the deadline for repayment of the loan, NewCo agrees to provide a Transferred Employee with a bridge loan (subject to similar loan terms under such Transferred Employee's existing loan) to the extent necessary to avoid an early distribution penalty tax. Notwithstanding the foregoing, neither Section 10.1(b) nor

---

Section 10.1(g) shall be interpreted to require NewCo to provide or maintain any specific investment alternative (including the Pfizer stock funds) as an investment alternative in the NewCo 401(k) Plan, or to guarantee any distribution alternative provided for in the Pfizer Savings Plan.

(h) On or within a reasonable time following the Employee Transfer Date, the Pfizer Parties shall pay to each Transferred Employee a prorated portion of such individual's annual target bonus for 2018. On or within a reasonable time following December 31, 2018, NewCo shall pay to each Transferred Employee who remains employed as of December 31, 2018 an annual bonus for 2018, which bonus shall be no less than a prorated portion of such individual's annual target bonus for 2018. The prorated bonuses described in this Section 10.1(h) shall be prorated based on the number of days during 2018 during which the Transferred Employee was (i) employed by the Pfizer Parties prior to the Closing Date, for the prorated bonuses payable by the Pfizer Parties or (ii) for the prorated bonuses payable by NewCo, by the Pfizer Parties and NewCo on and after the Closing Date.

(i) With respect to any Transferred Employee whose employment is terminated during the Continuation Period by NewCo and such termination qualifies as either a "Performance-Related Termination" or "Involuntary Termination" that would be eligible for severance benefits under Section 3.1 of the Pfizer Separation Plan, NewCo shall provide (i) salary continuation severance benefits to such Transferred Employee which are at least as favorable as those that would have been payable to such Transferred Employee in respect of a termination of employment under the Pfizer Separation Plan; and (ii) in the case of an Involuntary Termination, company-paid COBRA premiums for the "Severance Pay Duration Period" (as such term is defined in the Pfizer Separation Plan).

(j) The parties shall cooperate with each other to give effect to the provisions set forth in this Section 10.1. Without limiting the foregoing, in order to secure an orderly and effective transition of the employee benefit arrangements for Transferred Employees and their respective beneficiaries and dependents, the Pfizer Parties and NewCo shall cooperate, both before and after each of the

Closing and the Employee Transfer Date, and subject to applicable Laws, regarding the exchange of information related to the Transferred Employees, including employment records and benefits information.

10.2 No Benefit to Employees Intended. Nothing contained in this Agreement, express or implied, is intended to confer upon any Person not a party hereto any right, benefit or remedy of any nature whatsoever, including any right to employment or continued employment for any period of time by reason of this Agreement, or any right to a particular term or condition of employment. Notwithstanding anything to the contrary contained in this Agreement, no provision of this Agreement is intended to, or does, constitute the establishment of, or an amendment to, any employee benefit plan.

ARTICLE 11

CONDITIONS TO CLOSING

11.1 Conditions to NewCo's Obligation to Close. The obligations of NewCo to consummate the Transactions shall be subject to the satisfaction, on or prior to the Closing Date, of each of the following conditions, any of which may be waived by NewCo in writing:

(a) Representations, Warranties and Covenants. (i) The representations and warranties of Pfizer in this Agreement, other than the representations and warranties contained in Section 6.1 (Organization), Section 6.2 (Power and Authority Relative to this Agreement) or Section 6.14 (Finders or Brokers) (collectively, the "Pfizer Fundamental Representations") shall be true and correct in all respects as of the Closing Date (or, to the extent such representations and warranties speak as of a specific date or time, they shall be true in all respects as of such date or time), interpreted without giving effect to the words "Material Adverse Effect," "materially" or "material" or to any qualifications based on such terms, except for such inaccuracies under such representations and warranties which, taken together in their entirety, would not reasonably be expected to result in a Material Adverse Effect; (ii) the Pfizer Fundamental Representations shall be true and correct in all respects as of the Closing (or, to the extent such representations and warranties speak as of a specific date or time, they shall be true in all respects as of such date or time); and (iii) the Pfizer Parties shall have performed, in all material respects, all covenants and obligations in this Agreement required to be performed by any of the Pfizer Parties on or prior to the Closing.

(b) No Material Adverse Effect. Since the date of this Agreement, there shall not have occurred and be continuing any event, change or effect that has had, individually or in the aggregate, a Material Adverse Effect.

(c) Consents. All approvals, consents and waivers listed on Schedule 11.1(c) shall have been received, and executed counterparts thereof shall have been delivered to NewCo at or prior to the Closing.

(d) Deliveries. The Pfizer Parties shall have delivered to NewCo all of the documents, agreements and other items set forth in Section 4.2.

11.2 Conditions to Pfizer's Obligation to Close. The obligations of the Pfizer Parties to consummate the Transactions shall be subject to the satisfaction, on or prior to the Closing Date, of each of the following conditions, any of which may be waived by Pfizer in writing:

(a) Representations, Warranties and Covenants. (i) The representations and warranties of NewCo in this Agreement, other than the representations and warranties contained Section 7.1 (Organization), Section 7.2 (Capitalization), Section 7.4 (Power and Authority Relative to this Agreement) or Section 7.7 (Finders or Brokers) (collectively, the "NewCo Fundamental Representations") shall be true and correct in all respects as of the Closing Date (or, to the extent such representations and warranties speak as of a specific date or time, they shall be true in all respects as of such date or time), interpreted without giving effect to the words "Material Adverse Effect," "materially" or "material" or to any qualifications based on such terms, except for such inaccuracies under such representations and warranties which, taken together in their entirety, would not reasonably be expected to result in a material adverse effect on NewCo's ability to consummate the Transactions; and (ii) the NewCo Fundamental Representations shall be true and correct in all respects as of the Closing (or, to the extent

such representations and warranties speak as of a specific date or time, they shall be true in all respects as of such date or time); and (iii) NewCo and the Other Investors shall have performed, in all material respects, all covenants and obligations in this Agreement required to be performed by any of NewCo and the Other Investors on or prior to the Closing.

(b) Deliveries. NewCo shall have delivered to Pfizer all of the documents, agreements and other items set forth in Section 4.3.

(c) Receipt of Funds. Simultaneous with the Closing and in accordance with the terms and conditions of the Equity Commitment Letters, NewCo shall receive immediately available funds in the full amount of each Other Investor's cash portion of the purchase price due at the Closing (as defined in the Preferred Stock Purchase Agreement) for the shares of Class A Preferred Stock being purchased pursuant to the Preferred Stock Purchase Agreement as set forth opposite such Other Investor's name in the "Purchase Price Due at Closing" column on Exhibit A thereto.

11.3 Conditions to Obligations of Each Party to Close. The respective obligations of each party to this Agreement to consummate the Transactions shall be subject to the satisfaction, on or prior to the Closing Date, of each of the following conditions, which may be waived by mutual consent of Pfizer and NewCo, in writing:

(a) No Legal Impediments to Closing. There shall not be in effect any Order issued by any Governmental Authority preventing the consummation of the Transactions or that makes the consummation of the Transactions illegal.

ARTICLE 12

TAX MATTERS

12.1 Allocation of Consideration. Following the Closing Date, Pfizer shall prepare a proposed allocation of the applicable Consideration (for Tax purposes) among the Purchased Assets in accordance with Proposed Treasury Regulations Section 1.351-2(b).Pfizer and NewCo shall provide such cooperation and information to each other as the other may reasonably request to prepare and comment on the proposed allocation.To the extent NewCo disagrees with the proposed allocation, NewCo shall notify Pfizer in writing of any disagreement with the proposed allocation, and NewCo and Pfizer shall attempt in good faith to resolve the disagreement.If NewCo agrees with the proposed allocation prepared by Pfizer, or if NewCo and Pfizer resolve any disagreement regarding the proposed allocated, the parties shall report, act and file their respective Tax Returns in accordance with the allocation of Consideration as agreed to pursuant to this Section 12.1 and any adjustments thereto.In the event of any adjustment to Consideration, Pfizer and NewCo agree to cooperate in good faith to revise and amend the final allocation in accordance with the procedures set forth in this Section 12.1.

12.2 Intended Tax Treatment; Cooperation; Allocation of Taxes.

(a) It is intended that the transactions contemplated by this Agreement, taken together with the transactions contemplated by the Preferred Stock Purchase Agreement, shall be treated as an exchange described in Section 351 of the Code with "boot," and the

parties hereto shall report the Transactions consistent with such Tax treatment on their income Tax Returns unless otherwise required by Law or pursuant to the good faith resolution of a Tax contest.

(b) NewCo and the Pfizer Parties agree to furnish or cause to be furnished to each other, upon request, as promptly as practicable, such information and assistance relating to the Purchased Programs, Purchased Assets, and the Assumed Liabilities (including reasonable access to Books and Records) as is reasonably necessary for the filing of all Tax Returns, the making of any election relating to Taxes, the preparation for any audit by any Tax Authority, and the prosecution or defense of any claim or Proceeding relating to any Tax; *provided, however*, that nothing in this Agreement shall require the Pfizer Parties to provide or otherwise make available to NewCo a copy of their Consolidated Return. NewCo and the Pfizer Parties agree to cooperate with each other in the conduct of any audit or other Proceeding relating to Taxes involving the Purchased Programs, the Purchased Assets or the Assumed Liabilities. NewCo agrees to cooperate with and provide the Pfizer Parties with financial information relating to the Purchased Programs, Purchased Assets, and the Assumed Liabilities at Closing as needed to enable Pfizer Parties to comply with GAAP (including any information necessary for the conduct of a third-party valuation).

(c) The applicable Pfizer Party shall be responsible for and shall pay any Excluded Taxes.In respect of Purchased Assets or in connection with the conduct of the Purchased Programs, NewCo shall be responsible for and shall pay any Taxes arising or resulting from or in connection with the conduct of the Purchased Programs or the ownership of any of the Purchased Assets, in each case attributable to any Post-Closing Tax Period.Taxes described in the first two sentences of this Section 12.2(c) and Transfer Taxes shall be timely paid, and all applicable filings, reports and returns shall be filed, as provided by applicable Law.The paying party shall be entitled to reimbursement from the non-paying party in accordance with this Section 12.2(c) or Section 12.2(e), as applicable.Upon payment of any such Tax, the paying party shall present a statement to the non-paying party setting forth the amount of reimbursement to which the paying party is entitled under this Section 12.2(c) or Section 12.2(e), as applicable, together with supporting evidence as is reasonably necessary to calculate the amount to be reimbursed.If within ten (10) calendar days after receipt of such a statement, the non-paying party notifies the paying party in writing that such amount is not reasonable, the parties will negotiate in good faith to resolve such dispute.If the parties fail to resolve such dispute within thirty (30) calendar days, then within five (5) days after the end of such 30-day period they shall choose a "big four" independent accounting firm mutually acceptable to NewCo and Pfizer (the "Tax Referee") and the Tax Referee shall as promptly as practicable determine whether the amount of reimbursement was reasonable and, if not reasonable, shall appropriately revise it.If the non-paying party does not respond to the statement within ten (10) calendar days, or upon resolution of the disputed items, the amount of reimbursement (as such may have been adjusted) shall be binding on the paying and non-paying parties.The non-paying party shall make the reimbursement promptly but in no event later than ten (10) calendar days after the presentation of such statement if undisputed, or if disputed, after final determination by the Tax Referee.Any payment not made within such time shall bear interest from the due date for such payment until, but excluding, the date of payment at a

---

rate per annum equal to [***].Such interest shall be payable at the same time as the payment to which it relates and shall be calculated daily on the basis of a year of 365 days and the actual number of days elapsed, without compounding.

(d) All Transfer Taxes incurred in connection with the Transactions shall be borne by NewCo (provided, for the avoidance of doubt, that the Pfizer Parties shall indirectly bear a share of such Transfer Taxes by reason of their ownership interest in NewCo).The appropriate party will prepare and file all necessary Tax Returns and other documentation with respect to Transfer Taxes and, if required by applicable Laws, the other party will (and will cause its Affiliates to) join in the execution of any such Tax Returns and other documentation.To the extent permitted pursuant to applicable Law, the Pfizer Parties and NewCo will use Commercially Reasonable Efforts to minimize or avoid Transfer Taxes, if any, arising out of the transactions contemplated by this Agreement.

(e) In the case of any Tax period that includes (but does not end on) the Closing Date (a "Straddle Period"), the amount of Excluded Taxes with respect to the Purchased Programs or the Purchased Assets for a Straddle Period that are, in each case based upon or measured by net income or gain that relate to a Pre-Closing Tax Period will be

(f) determined based on an interim closing of the books as of the close of business on the Closing Date; *provided, however*,that exemptions, allowances or deductions that are calculated on an annual basis (such as deductions for depreciation and real estate taxes) will be apportioned between the Pre-Closing Tax Period and the Post-Closing Tax Period on a daily basis.The amount

of Excluded Taxes with respect to the Purchased Assets or the Purchased Programs for a Straddle Period that are not based upon or measured by net income or gain (other than Transfer Taxes) that relate to a Pre-Closing Tax Period will be deemed to be the amount of such Tax for the entire taxable period multiplied by a fraction, the numerator of which is the number of days in the Pre-Closing Tax Period and the denominator of which is the number of days in such Straddle Period.Notwithstanding the forgoing, items attributable to any action taken by NewCo on the Closing Date after the Closing that is neither expressly contemplated by this Agreement nor in the ordinary course of business will not be attributable to a Pre-Closing Tax Period.

12.3 Tax Contests.

(a) NewCo and the Pfizer Parties agree to cooperate and to cause their Subsidiaries to cooperate with each other to the extent reasonably required after the Closing Date in connection with any Proceedings conducted by Tax Authorities relating to any Taxes with respect to or in relation to any Purchased Asset (each a "Tax Contest"). NewCo and the Pfizer Parties shall provide timely written notices to each other of any Tax Contestrelating to the Purchased Assets for taxable periods for which any other party hereto may have a responsibility under this Agreement, or otherwise; *provided that* failure to so notify the other party will not relieve any party of liability that it may have under this Agreement except to the extent the other party is actually prejudiced by such failure.Such notice shall include a copy of the relevant portion of any correspondence

---

received from the relevant Tax Authority and describe in reasonable detail the nature of such Tax Contest.

(b) The Pfizer Parties shall, at their expense, have the right to conduct and control in good faith the defense of any Tax Contest for (i) a Straddle Period with respect to so much of such Tax Contest that could reasonably be expected to affect the Pfizer Parties' Tax Liability, rights to refunds or indemnification obligations under this Agreement or (ii) a Pre-Closing Tax Period; *provided*, *however* that with respect to any such Tax Contest described in clause (i) that could reasonably be expected to affect NewCo's Tax Liability, rights to refunds or indemnification obligations under this Agreement (and that does not relate to a Consolidated Return): (i) NewCo shall have the right to participate in all such Tax Contests, which will include participation in meetings with Tax Authorities and review and comment on written submissions to Tax Authorities, and (ii) the Pfizer Parties shall not settle such Tax Contest without the prior written consent of NewCo, which consent will not be unreasonably withheld, conditioned or delayed. For the avoidance of doubt, the Pfizer Parties shall have the exclusive right to control all matters relating to a Consolidated Return.Notwithstanding anything herein to the contrary, no party hereto shall have the right to conduct and control the defense of, or have participation rights with respect to, any Tax Contest with respect to income Tax Returns of the other party (or its Affiliates).

(c) This Section 12.3 shall govern the control of Tax Contests, rather than Section 14.4.

ARTICLE 13

TERMINATION

13.1 Termination of Agreement. This Agreement may be terminated and the Transactions may be abandoned at any time prior to the Closing:

(a) by the mutual written consent of NewCo and Pfizer;

(b) by NewCo, if (i) Pfizer is in breach of any provision of this Agreement such that the condition to Closing set forth in Section 11.1(a) would not be satisfied as of the time of such breach, and such breach shall not have been cured within thirty (30) days of receipt by such party of written notice from NewCo of such breach and (ii) NewCo is not, on the date of termination, in breach of any provision of this Agreement such that the conditions to Closing set forth in Section 11.2(a) would not be satisfied as of the Closing;

(c) by Pfizer, if (i) NewCo is in breach of any provision of this Agreement such that the condition to Closing set forth in Section 11.2(a) would not be satisfied as of the time of such breach, and such breach shall not have been cured within thirty (30) days of

receipt by such party of written notice from Pfizer of such breach and (ii) Pfizer is not, on the date of termination, in breach of any provision of this Agreement such that the conditions to Closing set forth in Section 11.1(a) would not be satisfied as of the Closing;

(d) by either NewCo or Pfizer, if the Closing has not occurred on or prior to May 1, 2018 (the "Drop-Dead Date") for any reason; *provided, however*, that the rights to

terminate this Agreement under this Section 13.1(d) shall not be available to any party whose breach of any covenants or agreements contained in this Agreement has been the cause of, or resulted in, the failure of the Closing Date to occur on or before the Drop-Dead Date; and

(e) by either NewCo or Pfizer, if there shall be any final non-appealable Order that permanently enjoins or otherwise prohibits consummation of the Transactions such that the condition to Closing set forth in Section 11.3(a) would not be satisfied as of the Closing; *provided, however*, that the rights to terminate this Agreement under this Section 13.1(e) shall not be available to any party whose breach of any covenants or agreements contained in this Agreement has been the cause of, or resulted in, the Order.

Any party desiring to terminate this Agreement shall give written notice of such termination to the other parties.

13.2 Effect of Termination. If this Agreement is terminated in accordance with Section 13.1, all obligations of the parties hereunder shall terminate, except for the obligations set forth in this ARTICLE 13 (Termination), Sections 9.6 (Confidentiality), 15.1 (Expenses), 15.5 (Governing Law), and 15.6 (Jurisdiction; Waiver of Jury Trial); *provided, however*, that nothing herein shall relieve any party from Liability for any willful breach of this Agreement or fraud.

ARTICLE 14

INDEMNIFICATION

14.1 Indemnification by Pfizer. Subject to the limitations set forth in this ARTICLE 14, from and after the Closing, Pfizer shall indemnify, defend and hold harmless NewCo and its officers, directors, agents, employees, shareholders and Affiliates (collectively, the "NewCo Indemnified Persons") from and against any and all Damages imposed on, or indirectly incurred by, without duplication, such NewCo Indemnified Person (collectively, "NewCo Damages") arising out of, relating to or resulting from (a) any breach of or inaccuracy in a representation or warranty of any Pfizer Party contained in this Agreement, as of the Closing Date; (b) any breach of a covenant of a Pfizer Party contained in this Agreement or breach of the terms and conditions of the Patent and Know-How License Agreement, including any practice of Intellectual Property Rights by Pfizer, its licensees or sublicensees outside of the scope of the licenses granted to Pfizer under the Patent and Know-How License Agreement; and (c) any Excluded Liability.

14.2 Indemnification by NewCo. Subject to the limitations set forth in this ARTICLE 14, from and after the Closing, NewCo shall indemnify, defend and hold harmless the Pfizer Parties and their respective officers, directors, agents, employees and Affiliates (collectively, the "Pfizer Indemnified Persons") from and against any and all Damages (collectively, "Pfizer Damages") arising out of, relating to or resulting from (a) any breach of or inaccuracy in a representation or warranty of NewCo contained in this Agreement; (b) any breach of a covenant of NewCo or any of its Affiliates contained in this Agreement or breach of the terms and conditions of the Patent and Know-How License Agreement, including any practice of Intellectual Property Rights by NewCo or its Sublicensees outside of the scope of the licenses granted to NewCo under the Patent and Know-How License Agreement; (c) any Assumed Liability; and (d) Taxes of NewCo for all Post-Closing Tax Periods; provided that the payment by NewCo shall equal the amount of Pfizer Damages multiplied by the Pfizer Damages Fraction.

"Pfizer Damages Fraction" shall mean a fraction whose numerator is one and whose denominator is equal to one minus the fraction of the shares of Equity Consideration held by the Pfizer Parties and their Affiliates at the time when such Pfizer Damages are due and payable (excluding all shares of Class A Preferred Stock that were purchased by the Pfizer Parties pursuant to the Preferred Stock Purchase Agreement), calculated assuming the conversion of all outstanding shares Class A Preferred Stock at the then applicable conversion rate.

14.3 Time for Claims. No claim may be made or suit instituted seeking indemnification pursuant to Sections 14.1(a) or 14.2(a) unless a written notice describing such claim in reasonable detail in light of the circumstances then known to the Indemnitee is provided to the Indemnitor prior to the eighteen (18) month anniversary of the Closing Date; *provided, however*, that claims arising out of, relating to or resulting from a breach of or inaccuracy in (a) any of the Pfizer Fundamental Representations or the NewCo Fundamental Representations may be made until the third (3rd) anniversary of the Closing Date and (b) Section 6.7 (Tax Matters) may be made until thirty (30) days after expiration of applicable statutes of limitations. Claims for indemnification pursuant to any other provision of Section 14.1 or Section 14.2 are not subject to the limitations set forth in this Section 14.3.

14.4 Procedures for Indemnification. Except as otherwise provided in Section 12.3, promptly after receipt by a party entitled to indemnification under Sections 14.1 or 14.2 or any other provision of this Agreement (the "Indemnitee") of written notice of the assertion or the commencement of any Proceeding with respect to any matter referred to in Sections 14.1 or 14.2 or in any other applicable provision of this Agreement, the Indemnitee shall give written notice describing such claim or Proceeding in reasonable detail in light of the circumstances then known to the Indemnitee to the party obligated to indemnify Indemnitee (the "Indemnitor"), and thereafter shall keep the Indemnitor reasonably informed with respect thereto; *provided, however*, that failure of the Indemnitee to keep the Indemnitor reasonably informed as provided herein shall not relieve the Indemnitor of its obligations hereunder except to the extent that the Indemnitor is prejudiced thereby. If any Proceeding is commenced against any Indemnitee by a Third Party, the Indemnitor shall be entitled to participate in such Proceeding and assume the defense thereof at the Indemnitor's sole expense; *provided, however*, that the Indemnitor shall not have the right to assume the defense of any Proceeding if (a) the Indemnitee shall have one or more legal or equitable defenses available to it which are different from or in addition to those available to the Indemnitor, and, in the reasonable opinion of outside counsel to the Indemnitee, counsel for the Indemnitor could not adequately represent the interests of the Indemnitee because such interests would be in conflict with those of the Indemnitor; (b) such Proceeding is reasonably likely to have a material adverse effect on any other matter beyond the scope or limits of the indemnification obligation of the Indemnitor; or (c) the Indemnitor shall not have assumed the defense of the Proceeding in a timely fashion (but in any event within thirty (30) days of notice of such Proceeding). If the Indemnitor, shall assume the defense of any Proceeding, the Indemnitee shall be entitled to participate in any Proceeding at its expense, and the Indemnitor shall not settle such Proceeding unless the settlement shall include as an unconditional term thereof the giving by the claimant or the plaintiff of a full and unconditional release of the Indemnitee, from all Liability with respect to the matters that are subject to such Proceeding, or otherwise shall have been approved by the Indemnitee, such approval not to be unreasonably withheld, conditioned or delayed.

14.5 Limitations on Indemnification.

(a) Notwithstanding anything herein to the contrary, Pfizer shall not be obligated to indemnify any NewCo Indemnified Person under Section 14.1: (i) unless the aggregate of all NewCo Damages exceeds $[***] (the "Deductible"), in which case the NewCo Indemnified Persons shall be entitled to recover all NewCo Damages only to the extent such NewCo Damages exceed the Deductible or (ii) to the extent that the aggregate of all NewCo Damages exceeds $[***] (the "Cap"); *provided, however*, the Cap and Deductible shall not apply to nor count towards any Pfizer indemnification obligation (A) arising out of, relating to or resulting from fraud by any Pfizer Party, or arising out of, relating to or resulting under Sections 14.1(b) or (c) or (B) arising out of, relating to or resulting from a breach of or inaccuracy in any Pfizer Fundamental Representation.

(b) Notwithstanding anything herein to the contrary, NewCo shall not be obligated to indemnify any Pfizer Indemnified Person under Section 14.2: (i) unless the aggregate of all Pfizer Damages exceeds the Deductible, in which case the Pfizer Indemnified Persons shall be entitled to recover all Pfizer Damages only to the extent such

(c) Pfizer Damages exceed the Deductible, which Pfizer Damages shall not be counted against the Deductible, or (ii) to the extent that the aggregate of all Pfizer Damages exceeds the Cap; *provided, however*, that the Cap and the Deductible shall not apply to nor count towards any NewCo indemnification obligation (A) arising out of, relating to or resulting from fraud by NewCo or arising out of, relating to or resulting under Sections 14.2(b), (c) or (d), or (B) arising out of, relating to or resulting from a breach of or inaccuracy in any NewCo Fundamental Representation.

(d) All indemnification payments under this Agreement shall be treated as adjustments to the Consideration for all Tax purposes unless Laws require otherwise.

(e) LIMITATION OF LIABILITY, DISCLAIMER OF CERTAIN DAMAGES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NEITHER PARTY WILL BE LIABLE TO THE OTHER FOR ANY SPECIAL, PUNITIVE, EXEMPLARY OR NOT REASONABLY FORESEEABLE DAMAGES OR ANY LOSS OF REVENUE OR PROFITS OR DIMINUTION IN VALUE OR SPECULATIVE DAMAGES THAT ARISE OUT OF OR RELATE TO THIS AGREEMENT OR THE PATENT AND KNOW-HOW LICENSE AGREEMENT OR THE PERFORMANCE OR BREACH HEREOF OR THEREOF; PROVIDED, HOWEVER, THAT THE FOREGOING SHALL NOT BE CONSTRUED TO PRECLUDE RECOVERY IN RESPECT OF ANY LOSS DIRECTLY INCURRED OR SUFFERED FROM THIRD PARTY CLAIMS.

14.6 Third Party Contributors. The amount of any and all Damages for which indemnification is provided pursuant to this ARTICLE 14 shall be net of any amounts actually received by the Indemnitee with respect to such Damages (i) under insurance policies after giving effect to any deductible, retention or equivalent loss rated premium adjustment and any costs or expenses incurred in recovering such insurance proceeds and (ii) otherwise from any Third Party (including any Tax Authority).

14.7 Duty to Mitigate. Each Indemnitee shall take, and shall cause its Affiliates to take, all reasonable steps to mitigate any Damages upon becoming aware of any event or circumstance that would reasonably be expected to, or does, give rise thereto, including incurring costs only to the minimum extent necessary to remedy the breach that gives rise to the Damages.

14.8 Satisfaction by Equity Consideration; Set-off. Pfizer, at its election (which election can be made in Pfizer's sole and absolute discretion, subject to Section 14.4), shall be permitted to satisfy Pfizer's indemnification obligations for NewCo Damages (a) by the cancellation of shares of Class A Preferred Stock owned by Pfizer (an "Equity Consideration Cancellation"), with such Equity Consideration Cancellation occurring such that $[***] of indemnified NewCo Damages shall be deemed satisfied for each share of Class A Preferred Stock cancelled; and/or (b) by setting off such amounts due against amounts payable to Pfizer pursuant to Sections 5.1(a), 5.1(b) or 5.1(c) (each of clauses (a) and (b) of this Section 14.8, the "Set-off"); or (c) any combination of clause (a) and (b). Notwithstanding anything to the contrary in this Section 14.8, any indemnification obligation of Pfizer for NewCo Damages arising out of, relating to or resulting from fraud, any Excluded Liability, Section 14.1(b) to the extent of a willful breach or any breach of or inaccuracy in any Pfizer Fundamental Representation shall be satisfied by Pfizer in cash, by wire transfer of immediately available funds, to the applicable NewCo Indemnified Persons. Nothing in this Section 14.8 shall be construed to increase Pfizer's indemnification obligations beyond such indemnification obligations that are otherwise provided for in this ARTICLE 14.

14.9 Qualifications. For purposes of determining the amount of any Damages that are the subject matter of a claim for indemnification under this Agreement, each representation and warranty in this Agreement will be read without regard and without giving effect to the term "material," "Material Adverse Effect" or "material adverse effect" or similar qualifiers (fully as if any such word or phrase were deleted from such representation and warranty).

14.10 Remedies Exclusive.

(a) Except as set forth in Section 14.11(b), the parties hereto expressly agree that from and after the Closing (i) the provisions of this ARTICLE 14 shall be the exclusive remedy for all claims of breach or indemnification pursuant to this Agreement and the Patent and Know-How License Agreement and (ii) in furtherance of the foregoing, each party hereby waives, to the fullest extent permitted by Law, any and all rights, claims and causes of action for any breach of any representation, warranty, covenant or agreement set forth herein or otherwise relating to the subject matter of this Agreement it may have against the other party hereto and their Affiliates and

each of their respective Representatives arising under or based upon any Law, except pursuant to the indemnification provisions set forth in this ARTICLE 14.

(b) The limitations set forth in Section 14.11(a) shall not apply to (i) claims of fraud that are proven and upon which a judgment entered in the involved Proceeding is expressly based, (ii) claims brought by NewCo arising from a Pfizer Party's willful breach of Section 9.5, (iii) claims brought by a Pfizer Party arising from NewCo's breach of its payment obligations under Sections 5.1(a), 5.1(b) or 5.1(c), or NewCo's material breach of any of its obligations under Sections 5.2(b)(i) or 5.2(b)(ii) or (iv) claims to equitable relief to which any Person shall be entitled pursuant to Section 15.13; *provided,*

---

that, for the avoidance of doubt, in the case of clauses (i), (ii), (iii) and (iv), the parties hereto shall have all remedies available under this Agreement or otherwise at Law without giving effect to any of the limitations or waivers contained herein, except, with respect to clause (iii), for the limitations in Section 14.5(d).

14.11 Remedies Cumulative. The rights of the NewCo Indemnified Persons and Pfizer Indemnified Persons under this ARTICLE 14 are cumulative, and each NewCo Indemnified Person and Pfizer Indemnified Person will have the right in any particular circumstance, in its sole discretion, to enforce any provision of this ARTICLE 14 without regard to the availability of a remedy under any other provision of this ARTICLE 14.

ARTICLE 15

MISCELLANEOUS PROVISIONS

15.1 Expenses. Whether or not the Transactions are consummated, unless otherwise indicated expressly herein, each party shall pay its own costs and expenses in connection with this Agreement and the Transactions, including the fees and expenses of its advisers, accountants and legal counsel.

15.2 Entire Agreement. This Agreement, including the exhibits and disclosure schedules specifically referred to herein, the Transaction Agreements and the Confidential Disclosure Agreement constitute the entire agreement between and among the parties hereto with regard to the subject matter hereof, and supersede all prior agreements and understandings with regard to such subject matter. In the event of any inconsistency between the statements in this Agreement and those in the exhibits and disclosure schedules specifically referred to herein or in any other Transaction Agreements or the Confidential Disclosure Agreement (other than an exception expressly set forth as such in the disclosure schedules) the statements in this Agreement will control.

15.3 Amendment, Waivers and Consents. This Agreement shall not be changed or modified, in whole or in part, except by supplemental agreement or amendment signed by the parties. Any party may waive compliance by any other party with any of the covenants or conditions of this Agreement, but no waiver shall be binding unless executed in writing by the party making the waiver. No waiver of any provision of this Agreement shall be deemed, or shall constitute, a waiver of any other provision, whether or not similar, nor shall any waiver constitute a continuing waiver. Any consent under this Agreement shall be in writing and shall be effective only to the extent specifically set forth in such writing.

15.4 Successors and Assigns. This Agreement shall bind and inure to the benefit of the parties hereto and their respective successors and permitted assigns, *provided, however*, that no party hereto may assign any right or obligation hereunder without the prior written consent of all other parties hereto. Notwithstanding the foregoing, (a) Pfizer may assign this Agreement or all of its rights or obligations hereunder to any other Pfizer Party or their wholly owned Affiliates without NewCo's prior written consent (but with notice to NewCo and provided that no such assignment shall relieve Pfizer of its obligations hereunder), *provided that* (i) any such assignment does not impose additional Taxes or costs on NewCo (or its Affiliates) or otherwise materially delay or impede Closing, and (ii) the assignee promptly provides NewCo with such documentation as may be prescribed by applicable Law or reasonably requested by NewCo to

determine NewCo's Tax withholding and reporting obligations in respect of payments to such assignee under this Agreement; and (b) NewCo may assign this Agreement to, (i) after Closing, any financing source as collateral, (ii) after Closing, any purchaser or licensor of substantially all of the assets of NewCo; or (iii) after Closing, the surviving entity in any merger, consolidation, share exchange or reorganization involving NewCo, in each case of clause (i), (ii) or (iii), only to the extent otherwise expressly authorized pursuant to the terms of the Investors' Rights Agreement and the Restated Certificate. Any permitted assignee shall assume all assigned obligations of its assignor under this Agreement.

15.5 Governing Law. The rights and obligations of the parties shall be governed by, and this Agreement shall be interpreted, construed and enforced in accordance with, the Laws of the State of Delaware, excluding its conflict of laws rules to the extent such rules would apply the Law of another jurisdiction.

15.6 Jurisdiction; Waiver of Jury Trial.

(a) Any judicial Proceeding brought against any of the parties to this Agreement or any dispute arising out of this Agreement or related hereto shall be brought in the courts of the State of Delaware, or in the United States District Court for the District of Delaware, and, by execution and delivery of this Agreement, each of the parties to this Agreement accepts the exclusive jurisdiction of such courts, and irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement. The foregoing consents to jurisdiction shall not constitute general consents to service of process in the State of Delaware for any purpose except as provided above and shall not be deemed to confer rights on any Person other than the parties to this Agreement. Each of the parties to this Agreement agrees that service of any process, summons, notice or document by U.S. mail to such party's address for notice hereunder shall be effective service of process for any Proceeding in Delaware with respect to any matters for which it has submitted to jurisdiction pursuant to this Section 15.6(a).

(b) EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT, EQUITY OR OTHERWISE) ARISING OUT OF OR RELATING TO OR IN CONNECTION WITH THIS AGREEMENT OR THE ACTIONS OF ANY PARTY HERETO IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE OR ENFORCEMENT HEREOF OR THEREOF. EACH PARTY HERETO (I) CONSENTS TO TRIAL WITHOUT A JURY OF ANY SUCH PROCEEDINGS, (II) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF THE OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (III) ACKNOWLEDGES THAT IT AND THE OTHER PARTY HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 15.6(b).

15.7 Rules of Construction. The parties acknowledge that each party has read and negotiated the language used in this Agreement. The parties agree that, because each party

participated in negotiating and drafting this Agreement, no rule of construction shall apply to this Agreement which construes ambiguous language in favor of or against any party by reason of that party's role in drafting this Agreement.

15.8 Severability. If any provision of this Agreement, as applied to either party or to any circumstance, is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision.

15.9 Exhibits and Schedules. All exhibits and disclosure schedules attached hereto shall be deemed to be a part of this Agreement and are fully incorporated in this Agreement by this reference.

15.10 Notices. Unless otherwise expressly provided herein, all notices, requests, demands, claims and other communications required or permitted to be delivered, given or otherwise provided for hereunder shall be in writing. All such written notices shall be sent in the manner indicated below to the applicable address, facsimile number or electronic mail address, and will be deemed effective as indicated below:

(a) if sent by personal delivery or by courier, upon delivery;

(b) if sent by facsimile transmission, upon the sender's receipt of confirmation of good transmission;

(c) if sent by electronic mail, upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement); or

(d) if sent by certified or registered mail or the equivalent (return receipt requested), upon delivery or attempted delivery;

provided, *however*, that in any such case, if delivered later than 5:00 p.m. (New York time) on any Business Day, delivery will be deemed to occur on the next Business Day.

If to NewCo at:

689 5th Avenue, 12th Floor
New York, NY 10022
Attention: Secretary
Email:
Phone:
Fax:

With copies (which shall not constitute notice) to:

Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304
Attention: Barbara Kosacz

Email: bkosacz@cooley.com
Fax: 650-849-7400

If to any of the Pfizer Parties at:

Pfizer Inc.
235 East 42nd Street
New York, NY 10017
Attention: Executive Vice President and General Counsel
Email:

With copies (which shall not constitute notice) to:

Ropes & Gray LLP
Prudential Tower
800 Boylston Street
Boston, MA 02199
Attention: Paul Kinsella

Email: Paul.Kinsella@ropesgray.com
Fax: 617-235-0822

or to such other address, facsimile number or electronic mail address as each party may designate for itself by notice given in accordance with this paragraph.

15.11 Rights of Parties. Nothing in this Agreement, whether express or implied, other than the rights of the NewCo Indemnified Persons and Pfizer Indemnified Persons pursuant to ARTICLE 14 is intended to confer any rights or remedies under or by reason of this Agreement on any persons other than the parties to it and their respective successors and permitted assigns, nor is anything in this Agreement intended to relieve or discharge the Liability of any third person to any party to this Agreement, nor shall any provision give any third person any right of subrogation or action over or against any party to this Agreement.

15.12 Public Announcements. No public announcement or disclosure (including any general announcement to employees, customers or suppliers) will be made by any party with respect to the subject matter of this Agreement, the Transactions or the Transaction Agreements without the prior written consent of Pfizer and NewCo; *provided that*, the provisions of this Section 15.12 shall not prohibit (a) NewCo from making public announcements or other disclosures after Closing regarding Products and related programs in the ordinary course of business or to comply with securities laws, (b) any disclosure required by any applicable Laws (in which case the disclosing party will provide the other parties with the opportunity to review and comment in advance of such disclosure) or (c) any disclosure made in connection with the enforcement of any right or remedy relating to this Agreement or any Transaction Agreement or the Transactions. NewCo further agrees that it will not, and it will cause each of its Affiliates to, not without the prior written consent of Pfizer, use in advertising, publicity or otherwise the name of Pfizer or any partner or employee of Pfizer, nor any trade name, trademark, trade device, service mark, symbol or any abbreviation, contraction or simulation thereof owned by Pfizer or any of its Affiliates.

15.13 Specific Performance. Notwithstanding anything in Section 14.10 to the contrary, the parties hereto agree that irreparable damage would occur and that the parties would not have any adequate remedy at Law in the event that the obligations of the parties to effect, on the terms and conditions set forth herein, the Closing and the other covenants and agreements set forth in this Agreement, including ARTICLE 3, ARTICLE 4, ARTICLE 5, ARTICLE 8 and ARTICLE 9, were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent such (and only such) actual or threatened breaches of this Agreement and to enforce specifically (without proof of actual Damages or harm, and not subject to any requirement for the securing or posting of any bond in connection therewith) such terms and provisions of this Agreement, this being in addition to any other remedy to which they are entitled at law or in equity, including money Damages.

15.14 Counterparts. This Agreement may be signed in any number of counterparts, including electronic scan copies thereof delivered by electronic mail, each of which shall be deemed an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

[Signature Pages Follow]

IN WITNESS WHEREOF, each of the parties has caused this Agreement to be executed on its behalf by their respective officers thereunto duly authorized all as of the date first written above.

PFIZER INC.

By: /s/ G. Mikael Dolsten
Name: G. Mikael Dolsten
Title: President, Worldwide, Research & Development

[Signature Page to Asset Contribution Agreement]

ALLOGENE THERAPEUTICS, INC.

By: /s/ Joshua A Kazam
Name: Joshua A Kazam
Title: President

[Signature Page to Asset Contribution Agreement]

ALLOGENE THERAPEUTICS, INC.

Shares of Common Stock
($0.001 par value)

AMENDMENT NO. 2 TO THE SALES AGREEMENT

November 2, 2023

Cowen and Company, LLC
599 Lexington Avenue
New York, NY 10022

To the addressee set forth above:

Reference is made to the Sales Agreement, dated November 5, 2019, as amended by Amendment No.1 to the Sales Agreement (the "**Amendment No. 1**"), dated November 2, 2022 (as amended, the "**Agreement**") by and between Allogene Therapeutics, Inc., a Delaware corporation (the "**Company**"), and Cowen and Company, LLC (the "**Agent**"). The Company and the Agent (collectively, the "**Parties**") wish to amend the Agreement, pursuant to Section 15 of the Agreement, to remove the specified aggregate dollar amount of Placement Shares that may be issued and sold from time to time under the Agreement (this "**Amendment**"). The Parties therefore hereby agree as follows:

1. The lead in to Section 1 and the first and second paragraphs of Section 1 of the Agreement are hereby amended and restated in their entirety to read as follows:

Allogene Therapeutics, Inc., a Delaware corporation (the "**Company**"), confirms its agreement (this "**Agreement**") with Cowen and Company, LLC ("**Cowen**"), as follows:

Issuance and Sale of Shares. The Company agrees that, from time to time during the term of this Agreement, on the terms and subject to the conditions set forth herein, it may issue and sell through Cowen, acting as agent and/or principal, shares (the "**Placement Shares**") of the Company's common stock, par value $0.001 per share (the "**Common Stock**"), subject to the limitations set forth in Section 5(c) of this Agreement. Notwithstanding anything to the contrary contained herein, the parties hereto agree that compliance with the limitation set forth in this Section 1 on the number or dollar amount of shares of Common Stock issued and sold under this Agreement shall be the sole responsibility of the Company, and Cowen shall have no obligation in connection with such compliance. The issuance and sale of Common Stock through Cowen will be effected pursuant to the Registration Statement (as defined below) filed by the Company with the Securities and Exchange Commission (the "**Commission**"), although nothing in this Agreement shall be construed as requiring the Company to use the Registration Statement (as defined below) to issue the Common Stock.

The Company has filed, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the

---

"**Securities Act**"), with the Commission an automatic registration statement on Form S-3 on November 2, 2022 (File No. 333-268117), including a base prospectus, relating to certain securities, including the Common Stock, to be issued from time to time by the Company, and which incorporates by reference documents that the Company has filed or will file in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the "**Exchange Act**"). The Company prepared a prospectus supplement specifically relating to the Placement Shares (the "**Prior Prospectus Supplement**") to the base prospectus that was included as part of such registration statement. On or about the date of Amendment No. 2 to this Agreement, the Company has filed or will file a new prospectus supplement specifically relating to the Placement Shares (the "**Initial Prospectus Supplement**") and may subsequently prepare additional prospectuses or prospectus supplements relating to the Placement Shares (together with the Initial Prospectus Supplement, each a "**Prospectus Supplement**" and collectively, the "**Prospectus Supplements**"). For the avoidance of doubt, no further Placement Shares will be issued or sold pursuant to the Prior Prospectus Supplement. The Company has furnished to Cowen, for use by Cowen, copies of the prospectus to be included as part of such registration statement, as supplemented by the Prospectus Supplement, relating to the Placement Shares. Except where the context otherwise requires, such registration statement, and any post-effective amendment thereto, as amended when it became effective, including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus (as defined below) subsequently filed with the Commission pursuant to Rule 424(b) under the Securities Act or deemed to be a part of such registration statement pursuant to Rule 430B or 462(b) of the Securities Act, or any subsequent registration statement on Form S-3 filed under the Securities Act by the Company with respect to the Placement Shares, is herein called the "**Registration Statement**." The base prospectus, including all documents incorporated therein by reference, included in the Registration Statement, as it may be supplemented by the Prospectus Supplement, in the form in which such prospectus and/or Prospectus Supplement have most recently been filed by the Company with the Commission pursuant to Rule 424(b) under the Securities Act, together with any "issuer free writing prospectus," as defined in Rule 433 under the Securities Act ("**Rule 433**"), relating to the Placement Shares that (i) is required to be filed with the Commission by the Company or (ii) is exempt from filing pursuant to Rule 433(d)(5)(i), in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g), is herein called the "**Prospectus**." Any reference herein to the Registration Statement, the Prospectus or any amendment or supplement thereto shall be deemed to refer to and include the documents incorporated by reference therein, and any reference herein to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement or the Prospectus shall be deemed to refer to and include the filing after the execution hereof of any document with the Commission deemed to be incorporated by reference therein. For purposes of this Agreement, all references to the Registration Statement, the Prospectus or to any amendment or supplement

thereto shall be deemed to include any copy filed with the Commission pursuant to the Electronic Data Gathering Analysis and Retrieval System ("**EDGAR**").

2. A new Section 5(c) is added to read as follows:

Limitations on Offering Size. Under no circumstances shall the Company cause or request the offer or sale of any Placement Shares if, after giving effect to the sale of such Placement Shares, the aggregate number or gross sales proceeds of Placement Shares sold pursuant to this Agreement would exceed the lesser of: (i) the number or dollar amount of Common Stock registered pursuant to, and available for offer and sale under, the Registration Statement as in effect at such time pursuant to which the offering of Placement Shares is being made, (ii) the number of authorized but unissued shares of Common Stock of the Company (less Common Stock issuable upon exercise, conversion or exchange of any outstanding securities of the Company or otherwise reserved from the Company's authorized capital stock), (iii) the number or dollar amount of Common Stock permitted to be offered and sold by the Company under Form S-3 (including General Instruction I.B.6. thereof, if such instruction is applicable), (iv) the number or dollar amount of Common Stock the Company's board of directors or a duly authorized committee thereof has authorized to issue and sell from time to time, and notified to Cowen in writing, or (v) the dollar amount of Common Stock for which the Company has filed the Prospectus Supplement (the lesser of (i), (ii), (iii), (iv) and (v), the "**Maximum Amount**"). Under no circumstances shall the Company cause or request the offer or sale of any Placement Shares pursuant to this Agreement at a price lower than the minimum price authorized from time to time by the Company's board of directors or a duly authorized committee thereof, and notified to Cowen in writing. Notwithstanding anything to the contrary contained herein, the parties hereto acknowledge and agree that compliance with the limitations set forth in this Section 5(c) on the number or dollar amount of Placement Shares that may be issued and sold under this Agreement from time to time shall be the sole responsibility of the Company, and that Cowen shall have no obligation in connection with such compliance. Each Placement Notice delivered hereunder shall be deemed to be a representation by the Company to Cowen of compliance with this Section 5(c).

3. A new Section 21 is added to read as follows:

Recognition of the U.S. Special Resolution Regimes.

(a) In the event that Cowen is a Covered Entity and becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from Cowen of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that Cowen is a Covered Entity and Cowen or a BHC Act Affiliate of Cowen becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against Cowen are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution

(c) For purposes of this Section 21; (a) "**BHC Act Affiliate**" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k), (b) "**Covered Entity**" means any of the following: (i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or (iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b), (c) "**Default Right**" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable, and (d) "**U.S. Special Resolution Regime**" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

4. Governing Law. THIS AMENDMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF, THE STATE OF NEW YORK WITHOUT REGARD TO ITS CHOICE OF LAW PROVISIONS.

5. Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same agreement. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6. Agreement Remains in Effect. Except as provided herein, all provisions, terms and conditions of the Agreement shall remain in full force and effect. As amended hereby, the Agreement is ratified and confirmed in all respects.

Terms used herein but not otherwise defined are used herein as defined in the Agreement.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof; whereupon this instrument, along with all counterparts, will become a binding agreement by the Company and the Agent in accordance with its terms.

Very truly yours,

ALLOGENE THERAPEUTICS, INC.

By: /s/ Geoffrey Parker
Name: Geoffrey Parker
Title: Chief Financial Officer

[Signature Page to Sales Agreement Amendment No.2]

The foregoing Amendment No. 2 to the Agreement is hereby confirmed and accepted as of the date first written above.

COWEN AND COMPANY, LLC

By: /s/ Michael Murphy
Name: Michael Murphy
Title: Managing Director

[Signature Page to Sales Agreement Amendment No. 2]

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, David Chang, M.D., Ph.D., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Allogene Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 2, 2023 November 2, 2023

/s/ David Chang
David Chang, M.D., Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Eric Schmidt, Ph.D., Geoffrey Parker, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Allogene Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 2, 2023 November 2, 2023

/s/ Eric Schmidt Geoffrey Parker
Eric Schmidt, Ph.D. Geoffrey Parker
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Allogene Therapeutics, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2023 September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Chang, M.D., Ph.D., President and Chief Executive Officer of the Company, and I, Eric Schmidt,

Ph.D., Geoffrey Parker, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 2, 2023 November 2, 2023

/s/ David Chang

David Chang, M.D., Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 2, 2023 November 2, 2023

/s/ Eric Schmidt Geoffrey Parker

Eric Schmidt, Ph.D. Geoffrey Parker
Chief Financial Officer
(Principal Financial and Accounting Officer)

This certification shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

DISCLAIMER

THE INFORMATION CONTAINED IN THE REFINITIV CORPORATE DISCLOSURES DELTA REPORT™ IS A COMPARISON OF TWO FINANCIALS PERIODIC REPORTS. THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORT INCLUDING THE TEXT AND THE COMPARISON DATA AND TABLES. IN NO WAY DOES REFINITIV OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED IN THIS REPORT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S ACTUAL SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.

REFINITIV